

EXHIBIT B

**IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEBRASKA**

CATHERINE PALMER, individually and on
behalf of others similarly situated,

Plaintiff,

v.

KCI USA, Inc.,

Defendant.

CASE NO. 4:19-CV-3084

CLASS ACTION

JURY TRIAL DEMANDED

EXPERT REPORT

BY JAN KOSTYUN

TABLE OF CONTENTS

Table of Contents

Introduction	1
Background and Experience	1
Compensation	5
Documents Reviewed and Assumptions	5
Methodology	6
Introduction	6
Statement of Opinions	7
Opinion A - The Peak Report fails to address its stated objective of describing the process to identify whether a telephone number was assigned to a cellular service.	8
Opinion B. The Peak Report fails to address its stated objective of describing the process to identify class members based on telephone numbers.	13
Opinion C. Plaintiff, and Plaintiff’s expert, do not identify any viable process that could be used to identify telephone numbers that were not assigned to the intended recipient.	15
Opinion D. The <i>wrong number</i> criteria that Plaintiff ostensibly plans to use in identifying telephone numbers not assigned to the intended recipient cannot satisfy its intended objective. Any potential note regarding a particular call must be individually examined to determine whether it in fact indicates a call to a wrong number, and even if it does, additional individual analysis is required to determine whether the person called was not the actual intended recipient.	16
A. Overly-inclusive nature of the search strings specified by Plaintiff.....	16
B. Order numbers apply to multiple telephone numbers.....	17
C. Account notes that do not represent interactions between a KCI Representative and a KCI patient.....	19
D. Ambiguous account notes that reference multiple telephone numbers.....	21
E. Account notes mis-interpreted as “wrong number” designations due to confusion by the patient or call recipient, or language barriers	23
F. Plaintiff’s “wrong number” criteria will identify “wrong numbers” that Peak’s methodology confirms to be correct numbers.....	26
G. Unique issues with identifying Defendant’s “intended recipient”	32
Opinion E. If a set of telephone numbers contained in the proposed class(s) could be identified, any attempt to accurately and reliably identify the subscribers and/or users of those numbers will require an account-by-account and number-by-number investigation and analysis across various third-party sources, including, cell phone carriers and the individual subscribers and users.	34
A. Public identification services and Skip Tracing	36
B. Reliability of subscriber information from carriers.....	44
F. Authorized user identification.....	49
Reservation of Right to Amend	51
Expert Report Summary	51
Exhibit A – Jan Kostyun CV	53
Exhibit B – LexisNexis Disclaimer	70
Exhibit C – Partial List of Occurrences of LexisNexis Disclaimer	71

Introduction

1. Counsel for Defendant, KCI USA, Inc. (“KCI”), contacted me for the purposes of an engagement as an expert witness in *Catherine Palmer, et. al. v. KCI USA, Inc.*, No. 4:19-cv-3084 (D. Neb.).

2. I have been asked by counsel for KCI to analyze, review, and consider the opinions and methodology presented in the Declaration of Carla Peak (“Peak Report”), dated August 18, 2020. I have also been asked to opine on the obstacles to the accurate identification of potential class members in this case.

Background and Experience

3. I am an independent technology consultant with over 35 years of experience in telecommunications, enterprise architecture, and information technologies. I received both a Bachelor of Science degree (magna cum laude) in Mathematics, as well as a Master of Science degree in Computer Science, from Union College in 1976. I have been employed in many capacities by major telecommunications companies, including Bell Telephone Laboratories, GTE, Verizon, and Syniverse Technologies. I have also been engaged as a consultant by telecommunications companies and regulatory authorities, including Rogers Wireless (the largest wireless carrier in Canada), CRC (the national telecommunications regulatory agency of Colombia), and Syniverse Technologies. I have worked at numerous technical levels in software development, database technology, and enterprise architecture. I have worked for over 15 years providing consulting services, software development, and data analysis in the field of telephone number portability. This experience covers landline, wireless, and intermodal (landline-to-wireless or wireless-to-landline) number portability, as well as telephone number pooling. I have

played lead roles in the technical and organizational processes of porting landline numbers in the U.S. as well as wireless numbers in the U.S., Canada, and Colombia.

4. As a software architect for Bell Telephone Labs, GTE, Verizon, and Syniverse, I also developed expertise in areas such as landline and wireless number provisioning, including the end-to-end process of establishing service for an initial subscriber; landline and wireless order-entry, including the collection of subscriber contact information; initial implementation of the National Do Not Call Registry; technical experience with features such as voice calling, SMS messaging, fax transmissions, voicemail, auto dialer and Interactive Voice Response Unit (IVRU) technology, and switching implementations; and a wide variety of telecommunications industry standards.

5. I also have extensive experience in database methodologies, data analysis, and data mining. My experience with database technologies includes hierarchical, network and relational database models and implementations. I have instructed working professionals on the use of database programming, support and internal architecture, and have developed database training courses. I am proficient with advanced database modeling, optimization and query techniques, as well as the development of database software applications. I have personally performed database queries and data analysis against hundreds of data stores, including but not limited to Internal and National Do Not Call lists, Wireless Block identifiers, Number Portability transaction lists and telephone call records produced by both wireless carriers and businesses involved in dialing campaigns.

6. I have extensive experience with call center operations and dialing systems, including those used for inbound and outbound calling campaigns. In my tenure with GTE/Verizon, I performed early research with Intel-based Computer Telephony Interfaces (CTI),

including text-to-speech translation and automated dialing interfaces. I have worked closely with IVRU engineers and application architects to develop programmatic interfaces used for inbound and outbound calling. I have worked closely with call center personnel at telecom businesses such as GTE, Verizon, Syniverse and Rogers Wireless while supporting Customer Relations Management (CRM) applications that include interfaces to inbound and outbound dialing systems.

7. For the past 10 years I have worked as a consultant and expert witness on cases covering Telephone Consumer Protection Act (“TCPA”) issues, patent litigation, software copyright infringement and trade secret misappropriation, software value determination, vandalism, and sabotage of application programs. I have provided expert witness testimony in depositions and in court. None of the opinions that I have offered as an expert witness have been stricken or rejected.

8. A copy of my curriculum vitae is attached hereto as Exhibit A.

9. I have not authored any publications in the past 10 years.

10. I have been qualified as an expert in federal courts and Florida state courts. In the past four years, I have been retained to provide deposition testimony as an expert in the following matters: *Cunningham v. Health Insurance Innovations*, No. 8:18-cv-00919 (M.D. Fla.); *Schaevitz v. Braman Hyundai*, No. 1:17-cv-23890 (S.D. Fla.); *Gurzi v. Penn Credit*, No. 6:19-cv-00823 (M.D. Fla.); *Virgne v. C.R. England*, No. 1:19-cv-2011 (S.D. Ind.); *Grome v. USAA Savings Bank*, No. 4:19-cv-03080 (D. Neb.); *Hill v. USAA Savings Bank*, No. 01-19-0003-2123 (AAA); *Howerton v. USAA Savings Bank*, No. 01-19-0003-3505 (AAA); *Dickson v. Direct Energy*, No. 5:18-cv-182 (N.D. Oh.); *Hage v. World Financial Group*, No. 1:19-cv-3386 (N.D. Ill.); *Samuel v. Adroit Health Group*, No. 1:19-cv-10487 (D. Mass.); *Iverson v. Advanced*

Disposal Services, No. 3:18-cv-00867 (M.D. Fla.); *Charvat v. The Southard Corporation*, No. 2:18-cv-190 (S.D. Ohio); *Lalli v. First Team Real Estate*, No. 8:20-cv-00027 (C.D. Cal.); *Rechul v. Crisp Marketing*, No. 1:20-cv-10171 (D. Mass.); *Quintana v. BB&T*, No. 1:18-cv-00748 (M.D. N.C.); *Saunders v. Dyck O'Neal*, No. 1:17-cv-00335 (W.D. Mich.); *Wang v. Wells Fargo*, No. 1:16-cv-11223 (N.D. Ill.); *Grant v. Regal Automotive*, No. 8:19-cv-00363 (M.D. Fla.); *Moraitis v. The HELPCard*, JAMS No. 1460005448; *Sandoe v. Boston Scientific*, No. 1:18-cv-11826 (D. Mass.); *Snyder v. U.S. Bank*, No. 1:16-cv-11675 (N.D. Ill.); *Wijesinha v. Bluegreen Vacations*, No. 1:19-cv-20073 (S.D. Fla.); *Thomas v. Peterson's Harley Davidson*, No. 0:18-cv-61723 (S.D. Fla.); *Albrecht v. Oasis Power*, No. 1:18-cv-01061 (N.D. Ill.); *Beets v. Molina Healthcare*, No. 2:16-cv-05642 (C.D. Cal.); *Gonzalez v. Redwood*, No. 8:17-cv-02184 (M.D. Fla.); *Eisenband v. Schumacher Auto.*, No. 9:18-cv-80911 (S.D. Fla.); *Berman v. Freedom Fin.*, No. 4:18-cv-01060 (N.D. Cal.); *Diaz-Lebel v. Target*, No. 0:17-cv-05110 (D. Minn.); *Garcia v. Target*, No. 1:16-cv-2574 (D. Minn.); *Jackson v. Palm Beach Credit Adjusters*, No. 9:18-cv-80124 (S.D. Fla.); *Williams v. Bluestem*, No. 8:17-cv-1971 (M.D. Fla.); *Wilson v. Badcock*, No. 8:17-cv-02739 (M.D. Fla.); *Scherkanowski v. Bluegreen Vacations*, No. 1:18-cv-00301 (D. N.H.); *Green-Mobley v. Capital One Auto Finance*, No. 3:17-cv-764 (S.D. Fla.); *Carpenter v. World Omni Fin.*, No. 01-18-0000-6972 (A.A.A.); *Buja v. Novation Capital, LLC.*, No. 9:15-cv-81002 (S.D. Fla.); *Kalmbach v. Nat. Rifle Ass'n of Am. and InfoCision, Inc.* No. 2:17-cv-00399 (W.D. Wash.); *Goins v. Walmart and Palmer Recovery Attorneys*, No. 6:17-cv-00654 (M.D. Fla.); *Reyes v. BCA Fin. Servs.*, No. 1:16-cv-24077 (S.D. Fla.); *Jacobs v. Quicken Loans Inc.*, No. 15-cv-81386 (S.D. Fla.); *Cook v. Palmer Reifler & Assocs.*, No. 3:16-cv-00673 (M.D. Fla.); *Couser v. Cucamonga Valley Med. Grp.*, No. 5:14-cv-01528 (C.D. Cal.); *Couser v. Dish One Satellite*, No. 5:15-cv-02218 (C.D. Cal.); *Comprehensive Health Care Sys. of the Palm Beaches*

v. M3 USA Corp., No. 16-cv-80967 (S.D. Fla.); *Nece v. Quicken Loans Inc.*, No. 8:16-cv-02605 (M.D. Fla.); and *Preman v. Pollo Operations*, No. 6:16-cv-00443 (M.D. Fla.).

Compensation

11. I am being compensated at the rate of \$400 per hour for my study and analysis in this case, as well as \$350 per hour for travel and \$450 per hour for testimony. My compensation is not dependent on my opinions or the outcome of this matter.

Documents Reviewed and Assumptions

12. In connection with preparing this Report, I have reviewed the following materials: Class Action Complaint, D.E. 1 (“CAC” or “Complaint”); Peak Report, dated August 18, 2020; Stipulated Protective Order, D.E. 27; Search criteria letter to David Krueger from Plaintiff’s Counsel dated April 10, 2020; Follow-up letter to David Krueger from Plaintiff’s Counsel dated May 20, 2020; Call record data files KCI000001.xlsx thru KCI000019.xlsx; Account note data files KCI000020.xlsx thru KCI000023.xlsx; Order Notes KCI000024.txt, KCI000026.txt, KCI000027.txt, KCI000062.txt, KCI000069.txt, KCI000071.txt, KCI000072.txt, KCI000098.txt.

13. I regularly research and follow developments in the telecommunications industry. This includes, but is not limited to: review of significant Federal Communications Commission (“FCC”) orders; review of TCPA cases and rulings; routine communication with former telecommunications associates; comparison of opinions set forth by other TCPA experts and professionals; communication with vendors who provide TCPA-related data services; review of industry blogs, news feeds and user groups, such as the Association of Credit and Collections Professionals (ACA International) and the Bates Group; and regular research into statistics and trends related to the telecom industry. This background has also informed and supported my opinions.

Methodology

14. The methodology I employed in producing my opinions and this report is based on my business experience in telecommunications, my experience as an expert with other TCPA-related cases, my education and training, and my review of documents and data relevant to this case, as cited above and throughout this report. Based on my experience and that review, I developed hypotheses regarding the methodology proposed by Plaintiff's expert in order to identify potential class members. I have tested and confirmed my hypotheses using a combination of related documentation, research, data analysis, and experience – similar to the techniques that I have used during my career as a telecommunications system architect – and used this to form my opinions and document them in this report.

Introduction

15. From my review of the Complaint, I understand that Plaintiff alleges that KCI contacted individuals through the use of automated calls and prerecorded messages, in violation of the TCPA (Complaint at ¶ 1). In addition to her individual claims, Palmer proposes to represent the following class:

All persons and entities throughout the United States (1) to whom KCI USA, Inc. placed, or caused to be placed, a call directed to a number assigned to a cellular telephone service, but not assigned to the intended recipient of KCI USA, Inc.'s calls, (3) by using an automatic telephone dialing system or an artificial or prerecorded voice, (4) from four years prior to the date of this complaint through and including the date of class certification (Complaint at ¶ 47).

16. Plaintiff's expert Carla Peak is a Vice President of Legal Notification Services for KCC Class Action Services, LLC ("KCC"), and presents herself as an expert in the field of legal notice in class action matters (Peak Report at ¶¶ 1-2).

17. The Peak Report describes that Plaintiff's counsel asked her "to describe the process that could be used to identify the names and addresses of potential class members for

which only a telephone number is available, to describe the process for determining whether a telephone number is or was assigned to a cellular telephone service, as well as the subsequent notice process” (*Id.* at ¶ 8). Notably, however, the Peak Report is effectively a notice plan for an *already certified* class. The Report begins with the statement “If the class is certified and notice is ordered, KCC could implement the following notification process, consistent with our experience in past similar matters” (*Id.* at ¶ 10), and the bulk of the Report is spent describing the class notification process (*Id.* at ¶¶ 14-22).

Statement of Opinions

18. Based on my analysis, it is my opinion that:
 - A. The Peak Report fails to address its stated objective of describing the process to identify whether a telephone number was assigned to a cellular service.
 - B. The Peak Report fails to address its stated objective of describing the process to identify class members based on telephone numbers.
 - C. Plaintiff, and Plaintiff’s expert, do not to identify any viable process that could be used to identify telephone numbers that were not assigned to the intended recipient.
 - D. The *wrong number* criteria that Plaintiff ostensibly plans to use in identifying telephone numbers not assigned to the intended recipient cannot satisfy its intended objective. Any potential note regarding a particular call must be individually examined to determine whether it in fact indicates a call to a wrong number, and even if it does, additional individual analysis is required to determine whether the person called was not the actual intended recipient.
 - E. If a set of telephone numbers contained in the proposed class could be identified, any attempt to accurately and reliably identify the subscribers and/or users of

those numbers – particularly as much as five years or more in the past – will require a detailed, account-by-account and number-by-number investigation and analysis across various third-party sources, including, among other potential sources, cell phone carriers and the individual subscribers and users.

Opinion A - The Peak Report fails to address its stated objective of describing the process to identify whether a telephone number was assigned to a cellular service.

19. Importantly, the Peak Report is in essence a notice plan for an *already certified* class. Ms. Peak does not contend or assert that either she or her employer (a class action administrator) has ever served as an expert at the *class certification* stage. (Peak Report ¶¶ 5, 6.) The Peak Report itself begins its analysis with “[i]f the class is certified and notice is ordered” (Peak Report ¶ 10.) The report has as its objective providing notice to “at least 70% of likely class members,” rather than an effort to identify class members for purposes of class certification. (Peak Report ¶ 18.)

20. With that in mind, the Peak Report states that, if a class were to be certified in this case, “KCC would obtain the list(s) of telephone numbers from the parties that belong to potential class members. At the broadest level, the universe of potential class members includes those persons whose telephone numbers KCI USA Inc. (“KCI”) associates with having placed, or caused to be placed, a call using an automatic telephone dialing system or an artificial or prerecorded voice from four years prior to the date of the complaint through the date of class certification.” (Peak Report at ¶ 11).

21. But Peak makes no attempt or proposal to identify the list of numbers that belong to potential class members. As noted above, she assumes a class is already certified. For example, her definition of the “universe of potential class members” would include every

number to which KCI placed calls using an ATDS or prerecorded voice, without considering whether the numbers was allegedly assigned to the intended recipient, as specified in subsection (1) of Plaintiff's Complaint. Neither Peak nor Plaintiff has proposed any method to make this critical determination and, as I detail below, it will be shown that there is no reliable and administratively feasible method to determine which numbers were assigned to someone other than the intended recipient (see Opinion C below).

22. It is also unclear how Peak intends to narrow the telephone numbers to those belonging to class members based on the class criteria. Peak seems to assume that the Parties may otherwise narrow the list based on the class criteria. (Peak Report ¶ 11.) One of the few class criteria Peak even claims a potential capability to address is the ability to utilize a third-party vendor to identify cellular telephone numbers. (*Id.*) This, of course, ignores the key elements of class membership--namely, identifying those *other than* the intended recipients of the calls.

23. The Peak Report also suffers a critical defect insofar as it does not appear that Peak has reviewed any of the putative class data in this case, does not know the data available and does not profess an ability to analyze or comprehend the data set produced in this case.

24. And even as to one of the few services Peak does propose-- determining which telephone numbers were assigned to a wireless telephone service--Peak's complete description of the process to perform that complex and strategic task includes nothing more than the following 17 words: "KCC can utilize a vendor such as Pacific East to analyze the numbers to make that determination" (*Id.*) And it is still unclear whether Peak intends to use Pacific East to determine if numbers are currently assigned to a wireless service (which serves no useful purpose), or if

numbers were assigned to a wireless service at the historical date(s) of calls (which would be required).

25. Peak's scant description of her proposed methodology excludes numerous pieces of significant information:

- a. Peak provides no explanation of who or what "Pacific East" is, including the lack of even a website address.
- b. Peak states she would use "a vendor *such as* Pacific East," (Peak Report ¶ 11, emphasis added), but does not identify any other vendors such that an appropriate analysis of those other potential vendors could be performed.
- c. There is no description of any product or service offered by Pacific East to perform wireless identification.
- d. There is no description of any resources – such as databases, public records, carrier records, etc. – that Pacific East might use to perform wireless identification.
- e. There is no explanation whether Pacific East can perform historic wireless identification, or simply current wireless identification (which would provide no value in this case with a class definition that reaches back many years).
- f. There are no reliability statistics of any wireless identification that might be performed by Pacific East.
- g. There is no identification of any prior cases – or any capacity at all – in which Pacific East may have been used for wireless identification.

26. Notably, Peak did not demonstrate any capability for her proposed methodology to identify the historical wireless status of any telephone numbers. Peak did not demonstrate

whether her proposed methodology could even identify Plaintiff Palmer's 7223 telephone number as a wireless number at the date(s) of the alleged call(s) during the relevant time period. Again, Peak does not indicate she has seen the data involved in this case, much less that she has run any proposed methodologies on this data.

27. From my previous experience in number portability, there are significant barriers that prevent the accurate identification of the historical wireless status of telephone numbers. There is no single, publicly available database that can identify whether a given telephone number is even *currently* assigned to a wireless status, much less the ability to identify whether a number was wireless as of some date in the past.

28. In order to identify the historical wireless status of a phone number, Plaintiff would need to utilize a vendor who makes proper use of a wireless block identifier file, as well as a ported number file. The data that is used to populate a functional wireless block identifier file is sourced as part of the North American Numbering Plan Administration ("NANPA"), which has been primarily overseen by Neustar, and most recently Somos, Inc.¹ The data that is used to populate a ported number file was also previously sourced and maintained by Neustar, as part of its Number Portability Administration Center ("NPAC"), which is responsible for all number porting activity in North America—including the process of phone numbers changing carriers and changing status from wireless to landline, and landline to wireless. Since May 2018, Telcordia Technologies, d/b/a iconectiv, has assumed responsibility for the NPAC.² In order for vendors to accurately maintain a ported numbers file, those vendors must process data downloads from Neustar/iconectiv (either directly or indirectly) on a daily basis without failure

¹ North American Numbering Plan Administration at https://www.nationalnanpa.com/about_us/abt_nanp.html (last visited 9/11/2020)

² See *NAPM Announce Completion of Transition to iconectiv as Nation's New Local Number Portability Administrator*, iconectiv (May 29, 2018), <https://iconectiv.com/news-events/napm-announces-completion-transition-iconectiv-nations-new-local-number-portability>.

and without error. Additionally, in order to provide accurate identification of the wireless status of a telephone number, those data downloads from Neustar/iconectiv must have been processed, without failure and without error, every day since the inception of the wireless portability mandate in November 2003.³ This means that vendors must have successfully processed more than 6,000 consecutive daily downloads of porting data in order for their wireless identification files to be accurate. Missing even a single day of download—which could happen due to server failure, human error, software problems, or numerous other potential processing problems—would mean that the wireless status of thousands of phone numbers would be erroneous.⁴ Even a problem with a download that occurred as long as 15 or 16 years ago, could result in an incorrect wireless status being stored in a vendor database. And of course, if a vendor uses erroneous data for the identification of wireless status, then any subsequent attempt to use that data to identify potential class members would be erroneous as well.

29. Even if a vendor or service can perform its job perfectly, and maintain an accurate inventory of wireless blocks and ported numbers from their originating sources, that inventory is still subject to the accuracy of the data that is provided by NANPA and the NPAC. I have found that using the most highly regarded vendors of numbering resources does not necessarily ensure the accurate identification of the historical wireless status of telephone numbers. I am not aware of any vendor or service that can perform a reliable identification of the wireless status of telephone numbers based on given historical dates. Based on the total lack of detail in the Peak Report's methodology for ascertaining the historical wireless status of telephone numbers, as well as the technical and logistical barriers to reliable wireless identification as just described, it is my opinion that Peak has provided wholly insufficient information to enable a conclusion that

³ FCC, Wireless Local Number Portability (WLNP), <https://www.fcc.gov/general/wireless-local-number-portability-wlnp>.

she can accurately identify the telephone numbers that were wireless as of the historical date(s) that calls were placed to those numbers in this case.

Opinion B. The Peak Report fails to address its stated objective of describing the process to identify class members based on telephone numbers.

30. The Peak Report’s methodology for identifying class members based on telephone numbers is lacking just as much detail as its method for determining the wireless status of numbers. Peak describes how she proposes to determine the names of class members based on the selected telephone numbers, using just two sentences: “After de-duplication of the telephone numbers, the cellular telephone numbers will be sent to companies such as LexisNexis, PacificEast, or Nexxa for reverse lookup procedures. This is done in order to obtain name and address information associated with cellular telephone numbers” (Peak report at ¶ 12).

31. Once again, Peak’s bare-bones description of her proposed methodology excludes numerous pieces of significant information:

- a. As with her previous reference to Pacific East, Peak provides no citations for LexisNexis or Nexxa, and no description of any product or service offered by LexisNexis, Pacific East or Nexxa to obtain name and address information associated with cellular telephone numbers. For example, LexisNexis offers dozens of products and services, many of which purport to perform reverse lookups, but Peak only refers to these vendors at the broadest level possible, without any explanation of the specific product she intends to use, its capabilities, reliability, or databases from which such information is drawn, or why it is suited for the specific proposed process in this case.

⁴ Neustar advertises that it broadcasts more than 1.2 million number portability updates per day. *See The NPAC, Neustar & LNP*, NPAC, <https://www.npac.com/number-portability/the-npac-neustar-lnp>.

- b. Peak again uses the caveat “such as,” without identifying what other potential vendors she could use here.
- c. There is no description of any resources that these vendors might use to obtain name and address information.
- d. There is no explanation whether these vendors can identify historic names and addresses, or simply current names and addresses, based on telephone numbers.
- e. There are no reliability statistics of any names and address identification to be performed by these vendors.

32. Notably, Peak did not demonstrate any capability for her proposed methodology to identify the individual associated with any telephone number in this case. Peak did not demonstrate whether her proposed methodology could even identify Plaintiff Palmer as the individual associated with the 7223 number, at the date(s) of alleged calls to that number.

33. I was able to perform a reverse lookup of the 7223 number using LexisNexis’ Phone Finder reverse lookup service (see further description at paragraph 69 below), which returns up to ten individuals associated with a given telephone number. LexisNexis was unable to return ANY individual, for ANY timeframe, associated with the 7223 number. As an alternate source, I also searched for the 7223 number using TransUnion’s TLOxp product, with two TransUnion reverse-lookup searches: 411+ Search; and Super Reverse Lookup Search. Neither of these searches were able to find any individual associated with the 7223 number. It thus seems entirely likely that the very plaintiff in this lawsuit would not be identified as a class member by KCC’s methodology.

34. Also, quite ironically, Peak describes a proposed de-duplication process in ¶ 12 of her report – a trivial process in order to ensure that each telephone number appears only once,

and can be performed by any entry-level programmer or basic Excel user – with a similar level of detail as her proposed methods to identify wireless telephone numbers and the names and addresses associated with those numbers, which are critical to the class-identification methodology.

35. To the contrary, I will describe in Opinion E below that there is a massive amount of evidence that the vendors Peak would rely on cannot accurately identify the historical user or subscriber associated with a given telephone number, and that such a process could only be accurately performed through a labor-intensive individualized investigation.

Opinion C. Plaintiff, and Plaintiff’s expert, do not identify any viable process that could be used to identify telephone numbers that were not assigned to the intended recipient.

36. The Peak Report does not describe, or even acknowledge the need for, a process to identify telephone numbers that were not assigned to the intended recipient. I have not seen any proposed methodology or any documentation in the Peak Report to achieve this task.

37. It is my understanding that KCI has produced a set of data from KCI’s HERO System (which as I understand it, is essentially each KCI patient’s medical file that contains information regarding the patient’s prescription, services, and potentially notes of conversations with the patient, family members, or medical providers), that purports to identify account notes in which “wrong number” designations appear. It is also my understanding that this data was produced based on a set of search criteria specified by Plaintiff’s counsel. That search criteria included approximately 140 search strings, such as “wrong number”, “wrong phone #”, “wrng telephone number”, “wrng num”, “wn number”, “wn phone nbr”, etc.⁵

⁵ The search criteria specific by Plaintiff’s counsel was documented in a letter to David Krueger from Plaintiff’s Counsel dated April 10, 2020, and further described in another ‘follow-up’ letter dated May 20, 2020.

38. The Peak Report does not mention this data, this search criteria or any analysis of either to suggest that Peak attempted to identify telephone numbers that were not assigned to the intended recipient. It is not clear from the Peak Report that Peak contends that she *could* identify telephone numbers that were not assigned to the intended recipient.

Opinion D. The *wrong number* criteria that Plaintiff ostensibly plans to use in identifying telephone numbers not assigned to the intended recipient cannot satisfy its intended objective. Any potential note regarding a particular call must be individually examined to determine whether it in fact indicates a call to a wrong number, and even if it does, additional individual analysis is required to determine whether the person called was not the actual intended recipient.

39. I have analyzed the results of the account notes that satisfy Plaintiff's "wrong number" criteria, and found severe limitations to the data produced that would prevent its use as a viable means to identify telephone numbers that were not assigned to the intended recipient. These limitations include the overly-inclusive nature of the search strings specified by Plaintiff; the fact that some order numbers apply to multiple telephone numbers, preventing accurate cross-referencing of account notes to the correct telephone number; account notes that do not represent interactions between a KCI Representative and a KCI patient; ambiguous account notes that reference multiple telephone numbers; or account notes mis-interpreted as "wrong number" designations due to confusion by the patient or call recipient, or language barriers.

A. Overly-inclusive nature of the search strings specified by Plaintiff

40. One of the strings that Plaintiff's counsel requested be used to search KCI's account notes was "wn" (presumably what Plaintiff thought might be an abbreviation for "wrong number"). However, the search for this string resulted in a massive number of false-positive results being returned in the account note data production. Searching for the string "wn" returned account notes that included common words such as "known" and "own", but with no other description of a possible wrong number notation. It was also revealed that KCI Representatives

use the abbreviation “wn” to describe “wounds”. I understand that wound care is the primary objective of KCI’s business, and thus the string “wn” is pervasively found in the account notes, again usually without any other indication of a “wrong number,” or even being in relation to a telephone call. Analyzing the account note data produced by KCI reveals that nearly 85 % of the account notes produced include the string “wn”. The vast majority, however, have nothing whatsoever to do with telephone calls, let alone identifying “wrong number” calls.

41. [REDACTED]

[REDACTED]

[REDACTED]

42. [REDACTED]

[REDACTED]

B. Order numbers apply to multiple telephone numbers

43. [REDACTED]

[REDACTED]

[REDACTED]

44.

[REDACTED]

[REDACTED]

[REDACTED]

45.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

46. [REDACTED]

[REDACTED]:

[REDACTED].

47. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].

C. Account notes that do not represent interactions between a KCI Representative and a KCI patient

48. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

49.

[REDACTED]

[REDACTED]

[REDACTED]

50.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

51.

[REDACTED]

[REDACTED]

[REDACTED]

52.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

53.

[REDACTED]

[REDACTED]

[REDACTED]

54.

[REDACTED]

D. Ambiguous account notes that reference multiple telephone numbers

55.

[REDACTED]

[REDACTED]

[REDACTED]

56.

[REDACTED]

[REDACTED]

57.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

58. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

59. [REDACTED]

[REDACTED]

[REDACTED]

60. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

E. Account notes mis-interpreted as “wrong number” designations due to confusion by the patient or call recipient, or language barriers

61. [REDACTED]

[REDACTED]

[REDACTED]

62. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

63. [REDACTED]

[REDACTED]

[REDACTED]

64. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

65.

[REDACTED]

[REDACTED]

[REDACTED]

66.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

67.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>
<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>
<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>
<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>
<div>[REDACTED]</div>			<div>[REDACTED]</div>
<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>
<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>	<div>[REDACTED]</div>

		[REDACTED]	
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
		[REDACTED]	

Figure 1 – Additional false-positive examples of attempted “wrong number” identification

68.

F. Plaintiff's "wrong number" criteria will identify "wrong numbers" that Peak's methodology confirms to be correct numbers

69. As a test of the reliability of the reverse-lookup methodology loosely proposed by Peak, I extracted a random sample of 5,000 telephone numbers from the call data produced by KCI.⁶ I also added Plaintiff's 7223 telephone number to this data, and performed a reverse-lookup of the 5,001 telephone numbers using LexisNexis' Phone Finder service. The output provided by LexisNexis was able to identify at least one individual for 4,135 – or 83% - of the numbers provided.

70. For those telephone numbers with at least one individual identified, the LexisNexis Phone Finder reverse-lookup identifies anyone from one to ten individuals being associated with the exact same phone number. The complete name (First, Middle, Last) of each

⁶ The 5,000 telephone numbers were randomly selected from the call data produced by Defendant, without regard for wireless status or any relationship to “wrong number” notes

individual is identified as Identity1_Full through Identity10_Full. The Identities are presented in reverse chronological order, meaning that Identity1 represents the most recent individual associated with the number, Identity2 (if present) represents the individual associated with the number prior to Identity1, and so on.

71. Each Identity Name is also accompanied by address fields (street address, city, state, zip, county) and a date range. The date range fields are the date that the name was first seen by LexisNexis as being associated with the telephone number, and the date the name was last (most recently) seen by LexisNexis as being associated with the number.

72. Opinion E below describes numerous reasons why the data from reverse lookup services, including LexisNexis, is not reliable, as well as examples of incomplete or inaccurate results returned from such services when attempting to identify individuals associated with given telephone numbers. Nevertheless and for verification purposes (and after setting aside the 866 telephone numbers for which LexisNexis had *no* information to identify any individuals), I compared the results returned from LexisNexis for the 4,135 telephone numbers with at least one individual identified by LexisNexis, with a subset of the telephone numbers from KCI's call records that satisfied Plaintiff's *wrong number* search criteria. I performed this comparison in order to simulate the results of the reverse lookup methodology set forth in the Peak Report.

73. First, I selected account notes from KCI's records that included the following search terms: "Wrong number", "Wrong telephone number", "Wrong phone number", "Wrong #", "Wrong telephone #", "Wrong phone #", "Wrong nmbr", "Wrong telephone nmbr", "Wrong phone nmbr", "Wrong nbr", "Wrong telephone nbr", "Wrong phone nbr", "Wrong num", "Wrong telephone num", "Wrong phone num", "Wrng number", "Wrng telephone number", "Wrng phone number", "Wrng #", "Wrng telephone #", "Wrng phone #", "Wrng nmbr", "Wrng

telephone nmbr”, “Wrng phone nmbr”, “Wrng nbr”, “Wrng telephone nbr”, “Wrng phone nbr”, “Wrng num”, “Wrng telephone num”, and “Wrng phone num”.⁷

74. I then cross-referenced those account notes to the call records produced by KCI, in order to identify the telephone numbers for which a *wrong number* designation might apply.⁸

75. I then determined that 4,061 of the 4,135 telephone numbers that received LexisNexis “hits”, also had corresponding wrong number notes, based on the search terms identified in paragraph 73 above.

76. Finally, I compared the names in KCI’s records with the names returned from LexisNexis,⁹ for the 4,061 telephone numbers with corresponding *wrong number* account notes.

77. If LexisNexis is able to accurately identify the individuals associated with telephone numbers provided to it, and if Plaintiff’s search criteria is actually able to identify instances in which the wrong party was reached by KCI’s calls, then none of the names in KCI’s records should match the names returned by LexisNexis, for the same telephone number.

78. However, the results of this analysis produced numerous results for which LexisNexis returned the same name as that shown in KCI’s records for the same telephone number. This indicates that even though Plaintiff proposes to identify calls to someone other than the intended recipient using supposed “wrong number” search criteria in the account notes,

⁷ As described above, Plaintiff’s search criteria using some 140 search strings cannot return a usable or practical set of records that could be used to identify *wrong number* calls. The 30 search terms described here produce a manageable set of records that may include some valid indicia of possible *wrong number* calls, subject to additional manual investigation as I also have described.

⁸ Also described above is the fact that cross-referencing the Defendant’s account notes to the Defendant’s call records is unreliable, particularly since some account numbers translate to multiple numbers, making it impossible to determine the specific telephone number to which those account notes apply.

⁹ To perform the name comparison, I extracted the last name from the full name provided by LexisNexis for each number. I then searched the name field in Defendant’s call records for that last name and the same telephone number, and considered the comparison to be a match when the LexisNexis last name was found in Defendant’s name field. I performed the search with this method since I observed that the names in Defendant’s call records were stored as both first name followed by last name, as well as last name followed by first name.

Peak's proposed methodology to use LexisNexis to identify the class member names would confirm that the called party was actually the correct, intended recipient.

79.

[REDACTED]

80.

[REDACTED]

81.

[REDACTED]

82.

[REDACTED]

83.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

84. [REDACTED]

[REDACTED]

85. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

86. [REDACTED]

[REDACTED]

[REDACTED]

87. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

88. Putting aside the myriad problems with using reverse look-up databases like LexisNexis, these results establish that simply looking to call notes alone will be insufficient as a means of identifying wrong number calls. My sample results demonstrate that there are countless reasons that “wrong number” and similar responses can make their way into account notes, and provide mis-interpreted results of the call. For example, call recipients may falsely respond

wrong number to a call, simply because they don't wish to speak to the caller at the given moment – possibly because they don't feel well, they want to avoid what they believe will be an uncomfortable conversation, they errantly think the call is a marketing call or some unwanted call, or any number of reasons. The person answering the call may mistakenly respond *wrong number* to call, because they don't recognize the caller ID, they don't recognize the voice of the caller, or they don't understand the caller's explanation of the reason for the call (like for example, a language barrier, as shown in Paragraph 61 above). The person answering a call may be a friend, neighbor or family member of the intended recipient, and respond wrong number to the call – either intentionally or mistakenly – on behalf of the intended recipient for many of the reasons already described. Or the intended recipient who answers a call and responds wrong number may do so because of confusion that could be due to medical conditions or age.

89. **The overall result of this comparison revealed that, out of the 4,061 telephone number “hits” returned from LexisNexis that also had *wrong number* account notes, 1,470 of those numbers – more than one-third (about 36%) – had matching names with KCI's records – indicating that KCI had called the intended party, rather than the wrong party based on the account notes.**¹⁰ And these matching names were produced by comparing the

names in KCI's records only with the first identity (Identity1) returned from LexisNexis – comparing the names in KCI's records with additional Identities (Identity2, Identity3, etc. when they exist) would surely return even more confirmed matches. Also, as described in paragraphs 73 - 76 above, the LexisNexis names were compared to a subset of the notes found with Plaintiff's search criteria – i.e. only those notes that contained 30 of Plaintiff's 140 search terms. If the comparison had been made with a larger set of “wrong number” search results – e.g. “DNC”, “incorrect number” etc. – then surely even more names matching those from LexisNexis

¹⁰ The name match was performed by matching last names.

would be found. Importantly, even when names do not match between KCI's records and LexisNexis (or another third-party vendor Peak may propose), this does not necessary indicate a "wrong number" call for multiple reasons, as described in Opinions A and B above, and as further detailed and shown below.

G. Unique issues with identifying Defendant's "intended recipient"

90. This problem is further compounded by the nature of KCI's business as a medical device provider. Specifically, it is my understanding that KCI's patient (as identified in KCI's call log) may not actually be the "intended recipient" of calls. For example, an elderly or incapacitated person may be KCI's patient, but a family member has power or attorney and/or is otherwise the point of contact with KCI and provides his or her telephone number (as opposed the elderly or incapacitated person). Or a child may be prescribed a KCI medical device, but a parent or caregiver may give their telephone number for contact (as opposed to a minor child). In such cases, it is not accurate to state that the "intended recipient" is the patient as reflected in KCI's call logs. In these instances, one could not, as the Peak Report suggests, simply compare the patient name in KCI's logs against the a third-party's vendors potential subscriber records to identify an "unintended recipient."

91. [REDACTED]

92. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

93. Peak's Report does not take into consideration the nature of KCI's calls and the fact that "intended recipients" of calls are not necessarily the patient, but may be persons who are the patient's parents, children, caregivers, or otherwise have power or attorney over the patient and KCI's point of contact with respect to the patient. As a result, one cannot simply take the patient's name as the "intended recipient" and compare it to a list of putative subscribers for telephone numbers to find differing names and conclude on a group basis that the calls were to "unintended recipients." That problem is evidenced not only by KCI's records, but is also compounded by the reality that even when KCI does directly call a patient, the patient may be a regular *user* of a cellular telephone even if he or she is not the subscriber to that telephone number. While the Peak Report makes no effort to actually employ the methodology she suggests, even if she did, as set forth above, simply looking at the subscriber information (even if it is accurate) does not reveal anything about the actual person or persons who may lawfully be using a particular telephone number.

94. Based on my experience with database search capabilities; my observations of *wrong number* false positives from other TCPA cases; the diverse set of instances observed in the account notes and call records in this case - for which individualized analysis would be required to interpret whether or not a valid *wrong number* designation exists; the vast number of false-positives identified in the sample sent to LexisNexis; and the additional investigation required to determine the telephone numbers to which *wrong number* designations might apply - assuming that determination can even be made - it is my opinion that no administratively

feasible process exists to search KCI's account notes in order to identify telephone numbers that called but were assigned to someone other than the intended recipient.

Opinion E. If a set of telephone numbers contained in the proposed class(s) could be identified, any attempt to accurately and reliably identify the subscribers and/or users of those numbers will require an account-by-account and number-by-number investigation and analysis across various third-party sources, including, cell phone carriers and the individual subscribers and users.

95. As previously described, Plaintiff seeks to represent a class that includes those persons associated with cellular telephone numbers called by KCI, where those persons were not the intended recipient. As I explain below, based on my education, knowledge, experience, and review of materials associated with this case, it is my opinion that any attempt to accurately and reliably identify the subscribers and/or users of any cell phone or landline numbers called by KCI will require an account-by-account and number-by-number investigation across various third-party sources, including landline and cell phone carriers and the individual subscribers and users. This is primarily because there are no reliable services and data resources available, either publicly or commercially, to identify such persons accurately through a single, uniform method or process. Rather, apart from individual or entity subscribers themselves, the various landline and cell phone carriers are, in my opinion, the only other potential sources of information about historic subscribers for a particular telephone number. But, as I discuss below, carriers often do not have complete and accurate historic subscriber information dating back to August 2015. In addition, wireless and landline carriers generally do not maintain information about historic **users** of a particular telephone number as of specific dates of their use. That information, in my opinion, resides with the subscriber(s) and/or user(s) of a particular number as of the date of a challenged call.

96. In my opinion, to attempt to identify historic subscribers and users of any phone numbers called by KCI during the five-year period at issue, a call-by-call and number-by-number process must be undertaken.

97. Cell phone services do not follow a single pattern of ownership and use. Some cell phone accounts may have only one subscriber, who is also the sole user, but several other common iterations exist. For example, the subscriber (i.e., the person who contracts with a cellular telephone provider and whose name appears on the bill) may not be a user of the cell number at all, and there may be one or more authorized users of the number who are not the subscriber. This often occurs in the context of family plans (where a single family member is the subscriber of an account with several different numbers used by other family members) or business plans (where a business owner, corporation, or entity is the subscriber of a number with one or more different users).

98. Given these and other issues, as well as the lack of a single publicly-available database, directory, or other source accurately identifying historic subscribers and users of cell phone numbers, it is my opinion that any attempt to accurately and reliably determine the historic subscriber and user(s) of a given wireless number as of the date of a particular call will require individualized analysis of records obtained from telephone service carriers, subscribers, users, or some combination of these sources. The reliability of these sources will, in my opinion, vary from number to number, depending on factors such as the date of the call and the telephone carrier (assuming it is still in existence) for the number at issue. For similar reasons, it is also my opinion that the historic user(s) of a cell phone or landline number as of a particular date cannot be accurately and reliably identified without obtaining information from the subscribers and/or users themselves. Indeed, in many cases, it is my opinion that the subscriber(s) of a cell phone

account number as of the date of a call to that number, as well as the user(s) of that number at that same time, will be the only source of information and records about the authorized user(s), if any, of the number as of a historic date.

A. Public identification services and Skip Tracing

99. There are myriad publicly available databases that purport to perform reverse phone number lookups and provide subscriber—not user—information like name and address, and there are a number of vendors who provide varying levels of commercial data lookups, usually via Application Program Interfaces (API). The Peak Report states that she will rely on (in other words, she has not yet attempted any searches) these reverse lookup services “to obtain name and address information associated with cellular telephone numbers”. (Peak report at ¶ 12). Based on my research and my experience, it is my opinion to a reasonable degree of certainty that these services, and particularly those identified in the Peak Report, cannot reliably and accurately identify historic cell phone subscribers because each service is subject to significant limitations and errors. This is my opinion for a variety of reasons.

A. These services are data aggregators. As a result, the reliability of these services is entirely dependent on the reliability of their source data. Many free, web-based services do not identify their data sources, and so it is not possible to evaluate their accuracy. Issues such as errors in data entry, number reassignment, and out-of-date data multiply these inaccuracies. Data from public records is typically available only for current owners, and without the historical records that would be required to identify a subscriber at a given point in time when challenged calls were made. This is the case for all publicly available data sources of which I am aware, such as web-based reverse number lookups. As a result, these services cannot assist in identifying historic subscribers.

B. Commercial databases, such as LexisNexis, that offer paid searches to businesses, do advertise historical searches of their public record information. However, those data providers must aggregate that data themselves over time in order to store and produce historical results, frequently leading to significant inaccuracies. LexisNexis even carries the following disclaimer on its web-site, specifically addressing these limitations: “Due to the nature of the origin of public record information, the public records and commercially available data sources used in reports may contain errors. Source data is sometimes reported or entered inaccurately, processed poorly or incorrectly, and is generally not free from defect. This product or service aggregates and reports data, as provided by the public records and commercially available data sources, and is not the source of the data, nor is it a comprehensive compilation of the data. Before relying on any data, it should be independently verified” (emphasis added).¹¹ A partial image of the LexisNexis disclaimer is attached as Exhibit B, extracted from the LexisNexis document *Tips for Researching LexisNexis® Public Records via Lexis Advance®*.¹² Further inspection of LexisNexis’ web pages reveals their need to provide ample publication of their disclaimer. LexisNexis’ accuracy disclaimer appears in some form on more than fifty (50) different web locations, including services that cover insurance claims, health records, motor vehicle records, compliance data, and most notably – **public records**. (See Exhibit C). LexisNexis even provides a whitepaper offering services to improve the accuracy of their customers’ data records – including telephone numbers, names and addresses –

¹¹ See for example, LexisNexis Instant Verify at <https://risk.lexisnexis.com/products/instant-verify> (last visited 7/28/2020).

but includes their standard disclaimer warning that data provided by LexisNexis is prone to errors.¹³ It was also notable to find the **accuracy disclaimer** on LexisNexis' **Phone Finder** service, which purports to provide customer identity data based on phone number searches.¹⁴ As one can see, LexisNexis' own disclaimer supports many of the limitations that I have already itemized regarding the lack of accuracy in public and commercial data records, and that disclaimer does nothing to support the accuracy or reliability of data provided by LexisNexis. LexisNexis' accuracy disclaimer is not unique among commercial skip-tracing and public record identification vendors, including well-known vendors such as MicroBilt, Experian and TransUnion, and less popular vendors cited by Peak such as Pacific East and Nexxa. For example, Nexxa documents the following disclaimer regarding products and services on its website: "The information and materials on the Web Site could include technical inaccuracies or typographical errors. Changes are periodically made to the information contained herein. NEXXA MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO ANY INFORMATION, MATERIALS OR GRAPHICS ON THE WEB SITE, ALL OF WHICH IS PROVIDED ON A STRICTLY "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND AND HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES WITH REGARD TO ANY INFORMATION, MATERIALS OR GRAPHICS ON THE WEB SITE,

¹² See *Tips for Researching LexisNexis® Public Records via Lexis Advance®* at https://www.lexisnexis.com/pdf/Lexis_Tips.pdf (last viewed 7/28/2020).

¹³ White Paper – A Business Case for Fixing Provider Data Issues, available at http://techhubly.com/lexisnexis-resources/files/A%20Business%20Case%20for%20Fixing%20Provider%20Data%20Issues_WPNXR5062-0.pdf (last visited 7/28/2020).

¹⁴ LexisNexis Phone Finder at <https://risk.lexisnexis.com/products/phone-finder> (last visited 7/28/2020).

INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. UNDER NO CIRCUMSTANCES SHALL NEXXA GROUP OR ITS AGENTS OR AFFILIATES BE LIABLE UNDER ANY THEORY OF RECOVERY, AT LAW OR IN EQUITY, FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION, SPECIAL, DIRECT, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES (INCLUDING, BUT NOT LIMITED TO LOSS OF USE OR LOST PROFITS), ARISING OUT OF OR IN ANY MANNER CONNECTED WITH THE USE OF INFORMATION OR SERVICES, OR THE FAILURE TO PROVIDE INFORMATION OR SERVICES, FROM THE WEB SITE”.¹⁵

- C. The generic process used in the mobile industry for deactivation and recycling telephone numbers creates additional problems with the accuracy of historic subscriber data. The deactivation process typically follows this pattern: (1) a subscriber chooses to cancel service, and chooses not to port their number to a new provider; (2) the carrier cancels service and adds the telephone number to a deactivation list; (3) telephone numbers stay inactive for a prescribed number of days, depending on the carrier, before they are recycled and assigned to a new subscriber; and (4) after the deactivation period, the number can be reassigned to a new subscriber.¹⁶ Typically, the carrier/service provider(s) will update its internal

¹⁵ See NEXXA Group, Inc. (“NEXXA”) Website Privacy Policy at <https://www.nexxagroup.com/corporate-overview/privacy-policy/> (emphasis added - last visited 9/1/2020)

¹⁶ According to Federal guidelines, disconnected numbers must be made available for reassignment in 90 days or less, but there is no minimum timeframe, indicating that carriers may reassign numbers in as little as one or two days. See 47 CFR § 52.15 at <https://www.gpo.gov/fdsys/pkg/CFR-2013-title47-vol3/pdf/CFR-2013-title47-vol3-sec52-15.pdf>.

records to indicate the change of subscribership for the reassigned number. However, many of the supplemental data sources previously discussed have a high probability of carrying outdated subscriber data. Reverse lookup services, private data sources such as those used by vendors like LexisNexis and the CNAM database, all face the likelihood of including outdated subscriber data due to this reassignment process. This issue is significant given that “over 37 million telephone numbers are reassigned each year.”¹⁷ Indeed, the FCC has acknowledged the inability to accurately track the individual associated with a given telephone number, and the lack of any available database or resource to do so. This acknowledgement spawned the FCC’s search for a solution to a nationwide database to track reassigned telephone numbers. The FCC describes that “Upon disconnecting his or her phone number, a consumer may not update all parties who have called him/ her in the past, including businesses to which the consumer gave prior express consent to call and other callers from which the consumer expects to receive calls”.¹⁸ And when referring to the limitations of currently available resources to track reassigned numbers, the FCC has stated “these databases are not comprehensive, and thus callers and consumers alike continue to be frustrated by unwanted calls to reassigned numbers”.¹⁹

D. For example, from the instant case, I selected six telephone numbers that returned “hits” from the LexisNexis reverse-append described in Paragraph 69 above. For

¹⁷ DISSENTING STATEMENT OF COMMISSIONER AJIT PAI Re: In the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, CG Docket No. 02-278, WC Docket No. 07-135 at 3.

¹⁸ Advanced Methods To Target and Eliminate Unlawful Robocalls, 47 CFR Part 64, [CG Docket No. 17-59; FCC 18-31], ¶ 3

¹⁹ See Second Report and Order, Advanced Methods to Target and Eliminate Unlawful Robocalls, CG Docket No. 17-59, FCC18-177, II.6

each of the six telephone numbers, I performed additional reverse lookups using a total of seven services: four web-based reverse-lookup services (Reverselookup.com, USphonebook.com, Spydialer.com and 411.com); a fee-based reverse-lookup via an Application Program Interface (Searchbug); and two smartphone-based reverse-lookup Apps (TruthFinder and Phone Reveal). For all of the six telephone numbers, at least four of the seven alternate services returned a common name for the given number. However, none of the seven alternate sources returned the same name that was returned by LexisNexis for any of the six telephone numbers. These variations are likely the result of differing source data, errors in data entry, variations in historic data, and other issues, but magnify the lack of reliability of LexisNexis and other reverse lookup services.

- E. As an additional test of LexisNexis' accuracy, I requested a full file disclosure – now referred to by LexisNexis as a “Consumer Disclosure Report” - of all information that LexisNexis carries on my personal identity.²⁰ LexisNexis provided me with a comprehensive 470 page report, dated November 21, 2018. The report included a section titled “Phone Records”, with the following description: “This section contains phone listings. The first and last seen dates correspond to the time periods when the source published the record, and not necessarily to the time period with which you had the phone number.” The report provided several telephone numbers for which I have been the subscriber. However, absent from the report were any wireless telephone numbers that I have used. The report did not list my current, primary wireless number, for which I’ve been the sole authorized user since 2005. This wireless number is also

prominently displayed on my publicly-available business website, and has appeared there for more than 5 years.²¹ The full file disclosure also did not list a prepaid wireless phone that I had used for a seven-month period prior to requesting the disclosure. For my telephone numbers that it did list, each number was listed on multiple records from multiple data sources that included conflicting dates, and many of the dates provided (*first seen* and *last seen* dates) did not match the actual dates that I was subscribed to those numbers.

F.

[REDACTED]

²⁰ LexisNexis *Access Your Consumer Disclosure Report* at <https://consumer.risk.lexisnexis.com/consumer> (last visited 7/27/2020).

²¹ See archived version of <http://jankostyun.com/contact-info/> captured April 7, 2015, at <https://web.archive.org/web/20150407033904/http://jankostyun.com/contact-info/> (last viewed 7/26/2020).

[REDACTED]

G.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

B. Reliability of subscriber information from carriers

100. As set forth above, there are multiple reliability issues with using data from public or commercial aggregators in performing a reverse look-up of wireless telephone numbers. These issues and errors are further compounded by the fact that, even when cell phone carriers are a source of historic subscriber information for a given cell phone number, there were presumably many carriers corresponding to the phone numbers at issue here during the relevant time period—some of which no longer exist or have been combined with others—and their historic subscriber records (assuming they exist) often do not accurately identify historical cell phone subscribers. The volatility of carrier ownership of telephone numbers over time due to mergers and acquisitions among carriers in the wireless industry, as well as carriers simply going out of business, also prevents accurate identification of historical carrier ownership. Wireless carriers can be classified in two categories: Facilities-based wireless carriers (also known as MNOs – Mobile Network Operators) and Wireless Resellers (also known as MVNOs – Mobile Virtual Network Operators). Facilities-based wireless carriers typically own their own network, equipment, and facilities such as switches and radio frequencies (*e.g.*, AT&T or Verizon),

whereas Wireless Resellers will lease a large portion of network, facilities, and sometimes support services (such as billing, order entry, etc.) from a Facilities-based carrier (*e.g.*, Boost Mobile or TracFone Wireless). Although the top five or six Facilities-based carriers own a large percentage of wireless telephone numbers and associated customers, there are still many smaller Facilities-based carriers and Resellers in operation responsible for a significant number of customers and wireless numbers. As just one example, DISH Network recently acquired nine million wireless customers through its acquisition of Sprint's pre-paid wireless business.²²

101. Currently, there are approximately 70 Facilities-based wireless carriers in operation, as well as roughly 110 Wireless Resellers²³. Over the past several years, there are also some 35 Facilities-based wireless carriers who are no longer in business (due to merger, acquisition, insolvency, etc.), and more than 50 Wireless Resellers who no longer provide service. Many of these former wireless carriers were still in business during the proposed class period. Based on this high volume of churn, it is likely that some of the wireless numbers that allegedly received challenged calls during the time period in question were owned and serviced by carriers who are no longer in business. Once again, there is no service or database that I am aware of that would allow for the identification of the carrier of record for those numbers at the historical date of alleged calls. And if any of those carriers could be identified, the fact that they

²² See *Dish Enters Wireless Retail Market* at <http://about.dish.com/2020-07-01-DISH-enters-retail-wireless-market-with-close-of-Boost-Mobile-advances-build-of-the-nations-first-standalone-5G-network> (last visited 8/13/2020).

²³ Both facilities-based wireless carriers and wireless resellers are described by a number of resources, including the FCC's Mobile Wireless Competition Report, and CTIA's Wireless Industry Indices Report. For a summary of current and previous wireless carriers and resellers, see Wikipedia's List of United States wireless communications service providers at https://en.wikipedia.org/wiki/List_of_United_States_wireless_communications_service_providers (last visited 7/28/2020) and Wikipedia's List of United States mobile virtual network operators at https://en.wikipedia.org/wiki/List_of_United_States_mobile_virtual_network_operators (last visited 7/28/2020).

are no longer in business would certainly prevent some or all of the requests to identify subscribers from being fulfilled.

102. Cell phone carriers have limited capabilities and varying standards for collecting and maintaining information on subscribers. Customers often provide inaccurate contact information or subscriber information might be incorrectly recorded via data entry. Since cell phones are not tied to a physical location, there are limitations in verifying that the address provided by the subscriber is accurate. Even if the customer data initially collected and recorded is accurate, changes to that data are common, due to actions like subscribers moving to a new address or changing names, but neglecting to report these to the carrier. As a result, it is not uncommon for one phone carrier's historical records to inaccurately identify completely different persons as being associated with the exact same telephone number during overlapping periods in time. Thus, even if any of the third-party sources Peak would attempt to rely upon claim to use actual carrier records (as Peak never identifies an actual specific product she would use, it is impossible to presently know or even test), it would likely lead to conflicting results regarding the subscriber identity, no different than those already shown above with the limited sample run against LexisNexis

103. The Peak Report plans to rely on third-party vendors for the lookup process and does not suggest sending subpoenas to phone carriers. Thus, while not expressly proposed at this point, to the extent this is suggested in the future to cure the apparent deficiencies in the Peak Report, in order to subpoena carriers in an attempt to identify subscribers as of some prior date, one must first identify the specific carrier that provided service to the given telephone number at the historical time of alleged calls. While there are resources available to identify the *current*

carrier for a telephone number or block of numbers, I am not aware of any such services that can accurately identify *historical* landline or wireless phone carriers.

104. Further, such a suggestion would be (in addition to not only being impractical due to the required volume of subpoenas) unreliable for several reasons. Sending the same fully-inclusive list of numbers to all carriers will also undoubtedly result in conflicting data results, which would be effectively impossible to resolve. For example, if all telephone numbers are sent to all carriers, Verizon and Sprint might both respond with historic customer records for that same telephone number. Those responses might identify different subscribers, or what appears to be the same subscriber with different service dates, different addresses, or variations in other key information. There would be no way, short of performing a manual investigation of all conflicting telephone numbers, to reliably determine which carrier's information (if either) was correct.

105. The historical carrier ownership of telephone numbers can also change on a larger scale due to Number Pooling. Introduced at the same time as Number Portability, carriers are required to participate in Number Pooling, where large blocks of telephone numbers, usually in multiples of 1,000 numbers, are donated from the control of one carrier to another, due to regulatory requirements. Similar to the number portability scenario, a telephone number that was owned at some point in the past by Verizon Wireless might now be owned by T-Mobile, due to donation of the block containing that number to T-Mobile from Verizon. Without a resource to identify the historical carrier ownership of numbers, a current lookup of the carrier that owns a telephone number would not accurately identify the correct carrier who owned that number at a given date in the past.

106. Besides the need to identify the correct carrier for given telephone numbers as of historical dates, there are still significant reasons why the subscriber identification provided later by a carrier would be highly suspect. It has already been discussed that many carriers who provided service to customers dating back to 2017 are no longer in business, and as such would be unable to identify any subscriber-related data. Carriers who are still active have their own set of limitations related to providing accurate, historical subscriber information, including four large hurdles:

- **Carriers' retention of records is limited:** The retention requirements for wireless carriers are less stringent than for landline carriers. For example, Verizon Wireless, the largest wireless carrier in the United States, only retains "Personally identifiable and other sensitive records ... only as long as reasonably necessary for business, accounting, tax or legal purposes,"²⁴ reported simply as "more than one year."²⁵ It's my understanding that other wireless carriers (such as Sprint) do not retain records past 18 months, and some subsidiaries of large carriers (such as MetroPCS, a subsidiary of T-Mobile) only retain subscriber records for six months.
- **Prepaid Phone Services:** According to the FCC's Twentieth Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless, it was estimated that, as of 4Q2016, roughly 23 percent of retail wireless connections were based on prepaid service.²⁶ There is no requirement or even standard for obtaining or reporting the subscriber information (i.e., the name of

²⁴ Verizon Wireless' Full Privacy Policy at <http://www.verizon.com/about/privacy/full-privacy-policy> (last visited 7/27/2020).

²⁵ PrivacySOS report, dated February 9, 2014 at <https://privacysos.org/blog/how-long-does-my-phone-company-store-my-data-how-easily-will-it-give-my-info-up-to-the-cops/> (last visited 7/27/2020).

²⁶ FCC 17-126, Appendix II: Table II.B.ii, p.73.

person purchasing the prepaid phone) back to the carriers.²⁷ As there is no requirement that prepaid phone carriers obtain and maintain subscriber identification data, accurately identifying individual, historic subscribers of prepaid phone services – accounting for nearly one-quarter of wireless phones – would be practically impossible.

- **Authorized User Identification:** A final significant issue is that even when a phone carrier or service provider can identify the subscriber to a telephone number (i.e., the person whose name is on the account), that frequently does not reflect that identity of the actual *user* of the phone who may be the intended recipient of a call. As this issue is not limited solely to a carrier’s wireless records, but may also be shown by the particular facts of KCI’s calls in this case, it will be addressed below independently.

F. Authorized user identification

107. As set forth above, the Peak Report either does not propose any method for identifying “wrong number” calls from KCI’s records, let alone a reasonably reliable method for taking any such “wrong number” calls and determining whether the intended recipient (as determined from KCI’s records) is different than the person to whom a particular telephone number was “assigned” (i.e., the subscriber) as identified by LexisNexis or some other similar third-party vendor. As importantly, however, the complex, number-by-number process of attempting to reliably and accurately identify the historic *subscriber* associated with a cell phone number as of the date of a challenged call does not even begin to address the identification of the actual cell phone *users*.

²⁷ There have been legislative efforts to require collection of this information. However, these efforts have never been passed into law. H.R. 4886 (114th): Closing the Pre-Paid Mobile Device Security Gap Act of 2016; Pre-Paid Mobile Device Identification Act, S. 3427, 111th Cong. (2010).

108. Because the subscriber and authorized user of a cell phone number are not necessarily the same person, identifying the subscriber does not mean the user has been or can be identified. It is extremely common for cell phone accounts have more than one user. For example, businesses often have a single cellular account and a single telephone number that is shared by several employees, or multiple numbers used by multiple employees – but the subscriber on the account might be the office administrator. Many carriers offer a “family plan” or even a “friends and family plan.” In these scenarios, families often have a single cell phone account and a single cell phone number shared by different family members, or multiple numbers that are used by multiple family members or even different individuals who are not related and do not have the same surname. As a result, even if it were possible to use carrier records to identify a number as belonging to an individual family plan, a core family unit (e.g., parents and children, or even grandparents, parents, and children) would not serve as a proxy for all potential users of that number, let alone allow for the identification of users unrelated to the actual subscriber. Typically, none of this user information is recorded in cell phone provider records.

109. This problem is not theoretical. Research has estimated that anywhere between 67-75% of wireless subscribers are on discounted, multi-line family plans.²⁸ And it has more recently come to light that groups of individuals who are not even related are taking advantage of discounted rates from family plans. A 2019 Wall Street Journal article notes that groups of friends, colleagues, roommates, and even neighbors participate in family plans. And the more diverse the membership in family plans, the less chance there is of being able to identify the

²⁸ *Wireless subscribers are finding breaking up is hard to do*, by Andy Vuong, The Denver Post, September 14, 2012, available at <https://www.denverpost.com/2012/09/14/wireless-subscribers-are-finding-breaking-up-is-hard-to-do/> (last visited 7/27/2020). Also, In Re Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, FCC 10-81, ¶ 164 (2010).

specific individuals who are associated with a specific telephone number under such plans. This same Wall Street Journal article also confirms that a recent survey by Cowen Inc. found that 70% of postpaid cellphone users participate in family plans.²⁹

110. As a result, in my opinion, there is no way to reliably and accurately attempt to identify the historic *user(s)* of a cellphone number as of a particular date without, at a minimum, first obtaining information from the subscriber(s) and user(s) of that number as of the date of the challenged call. And, given that the multiple user scenario I have described might be combined with other scenarios identified above, like a prepaid phone, even a number-by-number analysis may be insufficient to identify subscribers and user(s) for a given number at the time of the challenged call.

Reservation of Right to Amend

111. I reserve the right to offer additional opinions and/or to amend this report subject to additional information I receive after issuance of the same.

Expert Report Summary

112. The opinions that I have expressed in this report are derived from my education, experience, training, expertise, and knowledge, and are expressed with a reasonable degree of certainty in the fields of telecommunications and data analysis.

113. The Peak Report provides no description or support for the method that she proposes in order to identify those numbers that were wireless at the date(s) of challenged calls. It has also been explained that the process for historical wireless identification is a complex task that must be carefully executed, and even using the best available resources, does not guarantee reliable results.

²⁹ See *The New Rules of the Family Cellphone Plan* at <https://www.wsj.com/articles/the-new-rules-of-the-family-cellphone-plan-11562405400> (last visited 7/27/2020).

114. There is clear evidence that the Peak Report provides no description or support for the method that she proposes in order to identify class members based on telephone numbers, and that the meager proposal that she has provided includes the use of vendors who cannot produce accurate or reliable results, and who have acknowledged that their services are not intended for the lawful identification of name and address information associated with telephone numbers for purposes of identifying putative litigation class members,

115. It has been explained that the Peak Report, as well as Plaintiff, have made no attempt at all to identify a viable process to identify the telephone numbers that were not assigned to the intended recipient. It has also been demonstrated through numerous examples that neither can the account note data - produced from Plaintiff's search criteria - be used for such identification, and that process could only be achieved by way of exhaustive manual research and analysis.

116. And it has been thoroughly described that the typical process proposed by TCPA plaintiffs, and the process proposed in limited part by Plaintiff in the instant case - using commercial reverse lookup vendors to identify individuals associated with class-qualified telephone numbers at specific historical date(s) - is fraught with pitfalls and inaccuracies that can only be remedied through individualized investigation.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge and ability and this declaration was executed on this 25th day of September, 2020 at Burlington, CT.



Jan Kostyun

Exhibit A – Jan Kostyun CV

Jan Kostyun is an independent technology consultant with over 35 years of experience covering the areas of telecommunications, enterprise architecture, and information technologies. He has been directly employed in various capacities by major telecommunications companies, including Bell Telephone Laboratories, GTE, Verizon, and Syniverse Technologies. He has also been engaged as a consultant on various telecommunications issues by telecommunications companies and regulatory authorities, including Rogers Wireless (the largest wireless carrier in Canada), CRC (the national telecommunications regulatory agency of Colombia), and Syniverse Technologies. He has worked at numerous technical levels in software development, database technology, and enterprise architecture. He has worked for over 20 years providing consulting services, software development, and data analysis in the field of telephone number portability. This experience covers landline, wireless, and intermodal (landline-to-wireless or wireless-to-landline) number portability, as well as telephone number pooling. He has played lead roles in the technical and organizational processes of porting landline numbers in the U.S. as well as the porting process for wireless numbers in the U.S., Canada, and Colombia.



As a software architect for Bell Telephone Labs, GTE, Verizon, and Syniverse, Mr. Kostyun also developed expertise in areas such as landline and wireless number provisioning, including the end-to-end process of establishing service for subscribers; landline and wireless order-entry, including the collection of subscriber contact information; initial implementation of the National Do Not Call registry; technical experience with telecom features such as voice calling, SMS messaging, fax transmissions, voicemail, auto dialer and Interactive Voice Response Unit (IVRU) technology, and switching implementations; and a wide variety of telecommunications industry standards.

Mr. Kostyun also has extensive experience in database methodologies, data analysis, and data mining. His experience with database technologies includes hierarchical, network and relational database models and implementations. He has instructed working professionals on the use of database programming, support and internal architecture, and has developed database training courses. He is proficient with advanced database modeling, optimization and query techniques, as well as the development of database software applications. He has personally performed database queries and data analysis against hundreds of data stores, including but not limited to Internal and National Do Not Call lists, Wireless Block identifiers, Number Portability transaction lists; carrier call detail records; telephone number reverse-lookup data records from commercial data vendors; and call records and text messaging records from platforms used by a variety of vendors.

For the past ten years Mr. Kostyun has worked as a consultant and expert witness on cases covering TCPA issues, patent litigation, software copyright infringement and trade secret misappropriation, software value determination, vandalism, and sabotage of application programs.

Mr. Kostyun's expert witness work in TCPA cases has covered: wrong number and reassigned number calls; National and internal do not call violations; Consent and revocation of consent analysis; Identification of call recipient location; Wireless/landline identification; Capacity of dialing systems to generate telephone numbers and dial without human intervention; Ascertainability of class members based on telephone number; Carrier subpoena process; Voice calling; SMS/text messaging; Fax transmission; and Ringless

Voicemail delivery. Mr. Kostyun has testified both in deposition and in court, his opinions have never been stricken or rejected, and has he been cited in support of denial of class certification in multiple TCPA cases.

Professional Experience:

2012 to present *Independent Consultant*

Middletown, NJ/Burlington, CT

Representative case descriptions:

- Expert witness representing defendant under civil case alleging violation of Telephone Consumer Protection Act (TCPA). Extensive review and critique of plaintiff's expert witness reports; data analysis and research of very large call-record databases, alleged call violations and ported telephone numbers; and ATDS evaluation. Preparation of expert report in support of defendant, contributing to denial of class certification and judgment in favor of defendants.
- Expert consultant representing defendant in civil case alleging violation of TCPA. Provided analysis and report of plaintiff telephone numbers, porting activity and subscriber information.
- Expert consultant representing defendant under class action complaint alleging violation of TCPA involving text messaging/SMS activity. Provided analysis and report of CTIA/Wireless Industry best practices for short code messaging campaigns.
- In class action TCPA case, served as expert to provide ATDS evaluation, analysis of express consent and TCPA applicability of contested texts and voice calls.
- In class action TCPA matter, developed expert report addressing the feasibility and technical aspects of identifying users/subscribers of cell phones. Also developed expert report rebutting opposing expert's data analysis and subscriber identification, contributing to denial of class certification and exclusion of Plaintiff's expert report.
- Expert witness in class action TCPA complaint, providing in-depth analysis of National and internal Do Not Call (DNC) records and very large volume call record files, and critical assessment of opposing expert's data analysis.
- In class action TCPA case, developed expert report addressing the feasibility and technical aspects of identifying users/subscribers of fax telephone numbers. Also developed expert report rebutting opposing expert's opinions regarding successful completion of fax transmissions and identification of fax recipients.
- In class action TCPA matter, developed expert report addressing the feasibility and technical aspects of identifying users/subscribers of cell phones and residential landlines.
- In class action TCPA matter, developed expert rebuttal report challenging opposing expert's data analysis results of alleged DNC and wrong number calls, and addressing technical aspects of identifying users/subscribers of cell phones.
- In class action TCPA matter, performed extensive analysis of high-volume call data records against internal and national DNC files.
- In class action TCPA case, analyzed call data records, performed testing and analysis of defendant's telephone calling system and provided opinions addressing defendant's alleged use of an ATDS for telemarketing purposes.
- In class action TCPA case, developed expert rebuttal report challenging opposing expert's data analysis methodology, and addressed technical aspects of identifying users/subscribers of cell phones.

- In class action TCPA matter, developed expert rebuttal report challenging opposing expert's data analysis results of alleged DNC violations, and addressed technical aspects of identifying users/subscribers of cell phones.
- In class action TCPA matter, developed expert rebuttal report challenging opposing expert's data analysis results of alleged DNC violations, reliability of opposing expert's data vendors, and addressed technical aspects of identifying users/subscribers of cell phones.
- In class action matter involving the Washington Automatic Dialing and Announcing Device (WADAD) statute, provided expert analysis and support regarding carrier records, carrier subpoena responses, and identification of wireless/landline subscribers and calls within specific geographic boundaries.
- In class action TCPA case, rebutted opposing expert's analysis of wrong number designations, and class member identification, contributing to denial of class certification.
- In multiple class action matters, provided analysis of Defendant's dialing equipment and opinions addressing the capacity store or produce telephone numbers to be called, using a random or sequential number generator, as well as the capability to dial telephone numbers without human intervention.

2009 to 2011**Senior Consultant**
eComp Consultants**Tampa, FL**

Provided consulting on design and development of software products and wireless technology. Provided technology consulting and expert support for enterprise architecture, software engineering and telecommunications in the areas of:

- Patent portfolio evaluation, market valuation, and prior art analysis.
- Patent litigation consulting for information technology in telecommunications, wireless and enterprise architecture for validity/invalidity and infringement/non-infringement analysis.
- Software contract analysis for disputes involving custom software, software copyright and trade secret infringement, and software valuation.
- Functional analysis, Source Code reviews, Damage Assessment analysis and software tampering evaluation.

2009 to 2010**Independent Consultant****Tampa, FL**

Collaborated with Value Partners Management Consulting firm in preparation of proposal to the Colombian National Regulatory Agency for implementation of Wireless Number Portability across Colombia.

Prior experience**Senior Consultant**
BusinessEdge Solutions/EMC**Toronto, Ontario, Canada**

Provided strategic and tactical guidance to Rogers Wireless, Canada's largest wireless carrier, in the successful, on-schedule implementation of Canadian wireless number portability.

- Developed detailed specifications for Rogers' internal business applications interface to the Syniverse/Telcordia Service Management Gateway (SMG) for communication of wireless port requests & responses to wireless and wireline trading partners.
- Served as Rogers' representative to several industry-level committees, including SMG

Defect Management and SMG Testing, acting as liaison between Rogers and all Canadian carriers. Developed detailed specifications for acceptance and regression testing of SMG for entire Canadian industry.

- Provided integration expertise to Rogers' application development, network administrative system testing, production support, and program management teams.
- Provided in-depth knowledge of Telcordia SMG interface, Canadian portability standards (CWNP and CLOG), Wireless to Wireline (WPR to LSR) translation requirements, and post-implementation data analysis to determine customer porting trends and roadblocks.

Senior Consultant

Syniverse Technologies

Tampa, FL

Served as development specialist & subject matter expert during implementation of U.S. Wireless Number Portability (WNP). Designed the reporting data warehouse and client billing processes which support Syniverse's WNP & ICC Clearinghouse product offerings.

- Provided significant expertise in the technical internals, database design and API requirements of Telcordia's SMG platform; WNP WICIS Industry standards; InterCarrier Communications (ICC) Process; Service Order Administration (SOA)/NPAC interaction; and Tekelec LSMS database access.
- Subject matter consultant to other Syniverse WNP product offerings, including Pre-port Validation, Fallout Management, Wireline Porting and PortFlow Management. Responsible for interaction and consulting with Sales, Business Development, Training and Production Support organizations.
- In-depth experience with Cellular Provisioning, GSM/CDMA technologies, SIM Card provisioning

Software Engineer

Verizon Communications

Tampa, FL

Served as Enterprise Integration Architect for Local Number Portability (LNP) and Telephone Number Pooling (TNP) projects. Responsible for development of enterprise-level architecture and system integration of 38 major applications in order to develop and deploy Wireline LNP and Number Pooling capabilities for the entire former-GTE operating area.

- Managed technical team of 30+ individual project architects, including interaction with program management, functional owners, development teams, system testers and production support personnel.
- Coordinated retail and wholesale ordering, provisioning, billing and service assurance business functionality.
- Developed significant expertise in number portability network element systems (Telcordia's LSMS and SOA), including low-level knowledge and direct access to LSMS internal databases.
- Directly responsible for the successful national deployment of LNP/TNP in GTE/Verizon West. Maintained close working relationship with Network Engineering's TN Administrator, assisting with LSMS extracts for reconciliation processes, TNP block donation and block allocation processing, and creative use of LNP capabilities for special customer requests.

Senior Advisory Systems Engineer
GTE Telephone Operations

Tampa, FL

Provided extensive systems development work as enterprise architect and development team project manager.

- Developed technical specifications for numerous systems across GTE Telephone Operations, primarily within the Customer Contact and Operations domains. Technical specifications established the hardware, software and network architecture with emphasis on a distributed, UNIX-based, client/server environment.
- Established corporate standards for Relational DBMS products, including interaction with Oracle and Informix vendors
- Established corporate standards for UNIX hardware and operating system platforms, including interaction with SUN, HP and IBM vendors.
- Managed application development for TCOM, a distributed, IBM-based bulk mail processing application
- Application technical lead for Central Office personnel dispatch and work allocation application.

Senior Database Analyst
Exxon Company, USA

Houston, TX

Provided database analysis and database administration in large-scale IBM environment, specializing in project team support, implementation of DB2/SQL and use of IBM utilities, IBM Dialog Management Services.

Senior Database Analyst
Ford Aerospace

Houston, TX

Served as key member of application team for NASA contractor responsible for Shuttle Simulator Reconfiguration System. Responsibilities included data analysis and database design, and application lead.

Senior Consultant
Informatics, Inc.

Houston, TX

Consulted for major oil & gas and technology clients, offering application conversions, development of new systems, and application optimization. Conducted international technical training classes in IBM IMS DB/DC, IBM Utilities and IBM Internals

Senior Systems Analyst
GTE Data Services

Tampa, FL

Served as project lead and technical advisor for development of IBM/IMS-based customer billing application and IBM/CICS online order-entry application. Specialized in deployment of mini-computer office-automation systems.

Technical Lead
Bell Telephone Laboratories

Piscataway, NJ

Application lead for development of IBM/IMS-based Inventory Management system implemented across entire Bell System.

Education:

B.S. Mathematics – Magna Cum Laude

Union College, Schenectady, NY

M.S. Computer Science

Union College, Schenectady, NY

Wireless Communications	7 years	Syniverse/Telcordia Service Management Gateway (SMG), Canadian portability standards (CWNPG and CLOG), Wireless to Wireline (WPR to LSR) translation, Wireless Number Portability (WNP) & WICIS Industry standards, InterCarrier Communications (ICC), Service Order Administration (SOA)/NPAC,; and Tekelec LSMS database, Wireline Porting and PortFlow Management, Provisioning, GSM/CDMA technologies, SIM Card Provisioning
Telecommunications	25 years	Local Number Portability (LNP), Telephone Number Pooling (TNP), Telcordia's LSMS and SOA, Customer Contact, Provisioning & Operations, eCommerce applications
Database Technology	30 years	IBM IMS Database/Data Communication; DB2/SQL database design, Performance Optimization, Query Specialist; Informix; ORACLE; Logical Data Modeling; MS Access
Software Engineering	20 years	Enterprise integration, Order Entry/CRM, Trouble Management, Provisioning, Customer Billing, Work Allocation/Work Management, Inventory Management

Tools & Platforms

Languages and tools:	IBM Assembler, FORTRAN, COBOL, C, C++, JAVA, Visual Basic, IMS DB/DC, CICS, DB2/SQL, Informix, Oracle, MS Access/SQL, HTML, MS Office, WordPress
Platforms:	IBM Mainframe/370, IBM 4300, IBM 9700, IBM RS/6000, HP 9000, Sun SPARC, Windows-based PC
Operating Systems:	IBM MVS, IBM DOS/VSE, AIX, HP-UX, UNIX, Solaris, MS-DOS, Windows
Professional:	Published article in <i>Computerworld</i> , 9/24/84: "IBM ISPF dialog manager: More than meets the eye"

Case Experience:

Adam Hage et. al. v World Financial Group and TransAmerica Corp

Jurisdiction: U.S. District Court, Northern District of Illinois
 Client: World Financial Group and TransAmerica Corp, as defendants
 Nature of Case: Telephone Consumer Protection Act (TCPA) violation
 Nature of Engagement: Engaged as consulting expert to analyze alleged text message violations and opine on ability to ascertain class members based on telephone numbers.
 Represented by: Chittendon, Murday & Novotny LLC

Alex Jacobs et. al. v Quicken Loans, Inc.

Jurisdiction: U.S. District Court, Southern District of Florida
Client: Quicken Loans, Inc. as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report addressing the feasibility and technical aspects of identifying users/subscribers of cell phones. Also developed expert report rebutting opposing expert's data analysis and subscriber identification, contributing to denial of class certification and exclusion of Plaintiff's expert report.
Represented by: Goodwin Procter LLP

Amber Goins et. al. v Walmart and Palmer Recovery

Jurisdiction: U.S. District Court, Middle District of Florida
Client: Walmart and Palmer Recovery as defendants
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report rebutting opposing expert's data analysis, historic wireless identification and subscriber identification.
Represented by: Shepard, Smith, Kohlmyer & Hand, P.A. / Sheppard, Mullin, Richter & Hampton, LLP

Ameranth v Six Continents Hotels

Jurisdiction: Superior Court of DeKalb County, State of Georgia
Client: Six Continents as defendant in complaint for web advertising misuse and trade secret infringement of web-based concierge application
Nature of Case: Web Advertising Analysis and Intellectual Property Litigation
Nature of Engagement: Consulting expert analyzing web-based advertising practices, user interfaces, and development models; provided expertise in web marketing, online advertising, and eCommerce technology development standards, design and architecture.
Represented by: Alston & Bird

Anthony Gonzalez-Pagan et. al. v Redwood Clairmont on the Green, LLC

Jurisdiction: U.S. District Court, Middle District of Florida
Client: Redwood Clairmont on the Green, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Served as consulting expert to provide analysis of call data, identification of historical wireless status of telephone numbers, and identification of DNC calls.
Represented by: Berger Singerman LLP

Ariel Shuckett et. al. v DialAmerica Marketing, Inc.

Jurisdiction: U.S. District Court, Southern District of California
Client: DialAmerica, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Served as consulting expert to rebut opposing expert's analysis of call data, identification of historical wireless status of telephone numbers, and

identification of historical users/subscribers of telephone numbers.
Summary judgment granted to Defendant.
Represented by: Berenson LLP

Carrie Beets et. al. v Molina Healthcare, Inc.

Jurisdiction: U.S. District Court, Central District of California
Client: Molina Healthcare, Inc., as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Served as consulting expert to provide analysis of call data, identification of historical wireless status of telephone numbers, and identification of consent.
Represented by: Boies Schiller Flexner LLP

Carrie Couser et. al. v Cucamonga Valley Medical Group, Inc.

Jurisdiction: U.S. District Court, Central District of California
Client: Cucamonga Valley Medical Group, Inc. as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Served as expert to provide ATDS evaluation, analysis of express consent and TCPA applicability of contested texts and voice calls.
Represented by: Schmid & Voiles

Carrie Couser et. al. v Dish One Satellite, LLC

Jurisdiction: U.S. District Court, Central District of California
Client: Dish One, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Served as expert to provide in-depth analysis of National and internal Do Not Call (DNC) records and very large volume call record files, and critical assessment of opposing expert's data analysis.
Represented by: Benesch, Friedlander, Coplan & Aronoff LLP

Comprehensive Health Care Systems of the Palm Beaches et. al. v M3 USA Corporation

Jurisdiction: U.S. District Court, Southern District of Florida, West Palm Beach Division
Client: M3 USA Corp., as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report addressing the feasibility and technical aspects of identifying users/subscribers of fax telephone numbers. Also developed expert report rebutting opposing expert's opinions regarding successful completion of fax transmissions and identification of fax recipients.
Provided deposition testimony.
Represented by: Sheppard Mullin Richter & Hampton LLP

Craig Cunningham v Health Plan Intermediaries Holdings, LLC

Jurisdiction: U.S. District Court, Middle District of Florida
Client: Health Plan Intermediaries Holdings, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Engaged as consulting expert to analyze the wireless status of telephones numbers at issue and perform wireless telephone forensics.
Represented by: Greenspoon Marder LLP

C. S. Wang et. al. v Wells Fargo Bank NA, et. al.

Jurisdiction: U.S. District Court, Northern District of Illinois
Client: Wells Fargo Bank, Fifth Third Bank, First Data Merchant Services, Vantiv, Inc., National Processing Company, Ironwood Financial, LLC, John Lewis, Dewitt Lovelace, as defendants
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed declaration rebutting opposing expert's methodology for ascertaining class members. Also developed declaration rebutting opposing expert's methodology for wireless identification and carrier subpoena process.
Represented by: Polsinelli PC, Figliulo & Silverman PC, Baker Hostetler

Daniel Berman et. al. v Freedom Financial Network

Jurisdiction: U.S. District Court, Northern District of California
Client: Freedom Financial Network, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report rebutting opposing expert's ability to identify call recipients on the National Do Not Call Registry, opposing expert's flawed analysis of lead data names, and the feasibility and technical aspects of identifying users/subscribers of cell phones. Contributed to court's denial of class certification.
Represented by: Klein Moynihan Turco LLP

Danielle Moraitis et. al. v Dent-A-Med, Inc.

Jurisdiction: JAMS
Client: Dent-A-Med, as respondent
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report rebutting opposing expert's ATDS analysis. Provided opinions on defendant's dialing equipment's capacity to generate random or sequential numbers, and capacity to dial numbers without human intervention.
Represented by: Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Datamaxx Applied Technologies v Computer Projects of Illinois, Inc.

Jurisdiction: United States District Court, Northern District of Florida
Client: Datamaxx as plaintiff
Nature of Case: Software Copyright Infringement
Engagement: Prepared expert report assessing infringement of plaintiff's software copyrights, utilizing Abstraction-Filtration-Comparison test. Provided deposition testimony.
Represented by: Pennington, Moore, Wilkinson, Bell & Dunbar, P.A.

Derrick Thomas et. al. v Peterson's Harley Davidson

Jurisdiction: U.S. District Court, Southern District of Florida
Client: Peterson's, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Nature of Engagement: Provided expert report rebutting opposing expert's proposed methodology for identifying historic wireless status and historic users/subscribers of telephone numbers, and opposing expert's consent analysis. Also produced expert report addressing the dialing system used by Defendant for text message campaigns, and its capacity to perform as an ATDS.

Represented by: Robert L. Switkes & Associates, P.A.

Derrick Virgne et. al. v C. R. England, Inc.

Jurisdiction: U.S. District Court, Southern District of Indiana

Client: C. R. England, as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Nature of Engagement: Provided declaration with statistical analysis of text message interactions between Defendant and customers, including Stop requests and messages after Stop requests. Provided deposition testimony.

Represented by: Benesch Friedlander Coplan and Aranoff LLP

Donna Carpenter v World Omni Financial Corp.

Jurisdiction: American Arbitration Association

Client: World Omni, as respondent

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Nature of Engagement: Engaged as consulting expert to opine on whether defendant's dialing equipment has the characteristics of an ATDS.

Represented by: Akerman LLP

Eileen Nece et. al. v Quicken Loans, Inc.

Jurisdiction: U.S. District Court, Middle District of Florida

Client: Quicken Loans, Inc. as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Developed expert report addressing the feasibility and technical aspects of identifying users/subscribers of cell phones and residential landlines.

Represented by: Goodwin Procter LLP

Estrellita Reyes et. al. v BCA Financial Services, Inc.

Jurisdiction: United States District Court, Southern District of Florida

Client: BCA Financial Services as defendants

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Developed expert rebuttal report challenging opposing expert's data analysis methodology, and addressing technical aspects of identifying users/subscribers of cell phones. Provided deposition testimony.

Represented by: Shepard, Smith, Kohlmyer & Hand, P.A.

Grace Howerton v USAA Savings Bank

Jurisdiction: American Arbitration Association
Client: USAA Savings, as respondent
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report rebutting opposing expert's opinions that defendant's Aspect dialing system had the capacity to store or produce telephone numbers using a random or sequential number generator.
Represented by: Benesch, Friedlander, Coplan & Aronoff LLP

Israel Garcia et. al. v Target Corporation

Jurisdiction: U.S. District Court, District of Minnesota
Client: Target, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Provided affirmative report addressing the challenges to identifying historic users and subscribers of telephone numbers. Also produced an expert report rebutting opposing expert's analysis of Defendant's dialing system.
Represented by: Barnes & Thornburg LLP

Janet Hill v USAA Savings Bank

Jurisdiction: American Arbitration Association
Client: USAA Savings, as respondent
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report rebutting opposing expert's opinions that defendant's Aspect dialing system had the capacity to store or produce telephone numbers using a random or sequential number generator.
Represented by: Benesch, Friedlander, Coplan & Aronoff LLP

Jed Iverson et. al. v Advanced Disposal Services.

Jurisdiction: U.S. District Court, Middle District of Florida
Client: ADS, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Provided expert rebuttal reports disputing opposing expert's ability to identify class members based on Five9 call records and defendant's customer data. Analyzed and documented potential customer consent appearing in customer account records and audio recordings.
Represented by: Burr & Forman, LLP; Holland & Knight, LLP

Jerry Eisenband et. al. v Schumacher Automotive, Inc.

Jurisdiction: U.S. District Court, Southern District of Florida
Client: Schumacher, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Provided expert analysis of Plaintiff's expert report, and analysis of systems used to send alleged SMS text messages.
Represented by: Kurkin Forehand Brandes LLP

John Scherkanowski v Bluegreen Vacations

Jurisdiction: U.S. District Court, District of New Hampshire
Client: Bluegreen, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report analyzing Defendant's dialing system, its capacity to store or produce telephone numbers using a random or sequential number generator, its capacity to place calls without human intervention, and the use an artificial or prerecorded voice.
Represented by: Stearns Weaver Miller Weissler Alhadeff & Sitterson, P.A.

Karen Saunders et. al. v Dyck O'Neal, Inc.

Jurisdiction: U.S. District Court, Western District of Michigan
Client: DONI, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert report addressing the ability to identify the recipients of Direct Dial Voicemail messages, and the ability to identify consent based on Defendant's records.
Represented by: Golden Scaz Gagain, PLLP

Kathryn Kalmbach et. al. v National Rifle Association and InfoCision, Inc.

Jurisdiction: Superior Court of Washington, King County
Client: InfoCision, Inc. as defendant
Nature of Case: Washington Automatic Dialing and Announcing Device (WADAD) violation
Engagement: Provided expert consulting regarding carrier record content and retention, carrier subpoena responses, and identification of wireless/landline subscribers and calls within specific geographic boundaries.
Represented by: Baker & Hostetler LLP

Keith Snyder et. al. v U.S. Bank et. al.

Jurisdiction: U.S. District Court, Northern District of Illinois
Client: Deutsche Bank, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Provided analysis of Defendant's dialing system as it relates to TCPA's definition of an ATDS.
Represented by: Morgan, Lewis & Bockius LLP

Kenneth Albrecht et. al. v Oasis Power

Jurisdiction: U.S. District Court, Northern District of Illinois
Client: Oasis Power, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Provided expert consulting including data analysis of ringless voicemail data records, and identification of historic wireless subscribers of telephone numbers.
Represented by: Morgan, Lewis & Bockius LLP

Kevin Buja et. al. v Novation Capital LLC, et. al.

Jurisdiction: U.S. District Court, Southern District of Florida, West Palm Beach Division
Client: Novation, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Nature of Engagement: Developed expert rebuttal report challenging opposing expert's data analysis results of alleged DNC violations, and addressing technical aspects of identifying users/subscribers of cell phones. Provided deposition testimony.
Represented by: Vedder Price, P.C.

Lorenzo Quintana et. al. v Branch Banking and Trust

Jurisdiction: United States District Court, Middle District of North Carolina
Client: BB&T, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Engagement: Developed expert report addressing dialing equipment's capability to store or produce telephone numbers using a random or sequential number generator.
Represented by: Womble Bond Dickinson LLP

Lori Shamblin et. al. v Obama for America et. al.

Jurisdiction: United States District Court, Middle District of Florida, Tampa Division
Client: Obama for America and DNC Services Corp. as defendants
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Engagement: Extensive review and critique of plaintiff's expert witness reports; data analysis and research of very large call-record databases, alleged call violations and ported telephone numbers; and ATDS evaluation. Preparation of expert report in support of defendant, contributing to denial of class certification and judgment in favor of defendants.
Represented by: Perkins Coie LLP

Marc Schaewitz et. al. v Braman Hyundai, Inc.

Jurisdiction: United States District Court, Southern District of Florida
Client: Braman Hyundai, as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Engagement: Technical comparison of Ringless Voicemails to voice calls, analysis of lead and call data, contributing to denial of class certification. Provided deposition testimony.
Represented by: Stearns Weaver Miller Weissler Alhadeff & Sitterson, P.A.

Mark Preman et. al. v Pollo Operations

Jurisdiction: United States District Court, Middle District of Florida, Orlando Division
Client: Pollo Operations as defendants
Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Pre-trial review of text messaging procedures and data flow analysis.
Provided expert report evaluating adherence to CTIA/Wireless Industry
best practices for short code messaging campaigns.

Represented by: Akerman LLP

Matthew Dickson et. al. v Direct Energy, LP et. al.

Jurisdiction: United States District Court, District of Ohio

Client: Direct Energy as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Provided expert report addressing the reliability of Ringless Voicemail call
records, rebutting opposing expert's historical wireless analysis, class
identification using audio recordings, and identification of users
associated with given telephone numbers.

Represented by: McDowell Hetherington LLP

Michael Lutman v Harvard Collection Services

Jurisdiction: United States District Court, Middle District of Florida, Ft Myers Division

Client: Harvard Collection Services as defendants

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Provided expert analysis of plaintiff telephone numbers, porting activity,
subscriber information, and ATDS evaluation.

Represented by: Wilson Elser Moskowitz Edelman & Dicker LLP

Monifa Grant et. al. v Regal Automotive Group

Jurisdiction: United States District Court, Middle District of Florida

Client: Regal Automotive Group, as defendants

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Provided expert analysis of discrepancies between Defendant's subscriber
records and subscriber/user records returned from commercial
identification vendor.

Represented by: Golden Scaz Gagain PLLP

Monique Jackson et. al. v Palm Beach Credit Adjustors

Jurisdiction: United States District Court, Southern District of Florida

Client: Palm Beach Credit, as defendants

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Engaged as consulting expert to opine on ability to ascertain class
members based on telephone numbers, and analyze evidence of consent
and revocation.

Represented by: Shepard, Smith, Kohlmyer & Hand, P.A.

Moricz v Google

Jurisdiction: United States District Court, Western District of Washington at Seattle

Client: Michael Moricz as plaintiff

Nature of Case: Patent infringement of search engine software capabilities

Engagement: Provided technical research into history, evolution and current state of web-based search engine design and functionality. Development of claim construction report.

Represented by: Schwabe, Williamson & Wyatt, P.C.

PCS4Less v Go Mobile

Jurisdiction: State of Michigan, Circuit Court for Washtenaw County

Client: Go Mobile as defendant

Nature of Case: Copyright / Trade Secret on unlocking GSM/CDMA cell phone devices

Engagement: Provided expert analysis of cell phone unlocking methods.

Represented by: Gray Robinson

Resource Acquisition and Management Services v Mathews

Jurisdiction: State of Florida, Circuit Court for Hillsborough County

Client: Resource Acquisition and Management Services, Inc. as plaintiff

Nature of Case: Breach of Contract and Conversion of disputed property including application source code

Engagement: Provided expert report assessing the value of application source code.
Provided deposition testimony.

Represented by: Rocke, McLean and Sbar, P.A.

Samantha Grome v USAA Savings Bank

Jurisdiction: U.S. District Court, District of Nebraska

Client: USAA Savings, as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Nature of Engagement: Developed expert report rebutting opposing expert's opinions that defendant's Aspect dialing system had the capacity to store or produce telephone numbers using a random or sequential number generator.

Represented by: Benesch, Friedlander, Coplan & Aronoff LLP

Sara Diaz-Lebel et. al. v TD Bank and Target Corporation

Jurisdiction: U.S. District Court, District of Minnesota

Client: Target, as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Nature of Engagement: Developed expert report rebutting opposing expert's analysis of call records. Also provided analysis of Defendant's dialing system as it relates to TCPA's definition of an ATDS, as well as describing the restrictions to accurately ascertaining class members based on historic call data.

Represented by: Barnes & Thornburg LLP

Shehan Wijesinha et. al. v Bluegreen Vacations

Jurisdiction: U.S. District Court, Southern District of Florida

Client: Bluegreen Vacations, as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Nature of Engagement: Developed expert report rebutting opposing expert's identification of historical users/subscribers. Also provided analysis of Defendant's dialing system as it relates to TCPA's definition of an ATDS, as well as describing the restrictions to accurately ascertaining class members based on historic call data. Provided deposition testimony.

Represented by: Stearns Weaver Miller Weissler Alhadeff & Sitterson, P.A.

State of Florida v Poole

Jurisdiction: State of Florida, Circuit Criminal Court for Hillsborough County

Client: Poole as defendant

Nature of Case: Criminal complaint involving damage of application components

Engagement: Provided expert analysis and court testimony regarding the feasibility of performing a forensic analysis of hardware and software components. Provided court testimony.

Represented by: Pawuk and Pawuk, P.A.

Steven Sandoe et. al. v Boston Scientific Corporation

Jurisdiction: United States District Court, District of Massachusetts

Client: Boston Scientific, as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Developed expert rebuttal report challenging opposing expert's data analysis, identification of wrong number calls, identification of National DNC Registry violations, and identification of historic users/subscribers of telephone numbers. Provided deposition testimony. Directly contributed to Denial of Class Certification.

Represented by: Faegre Baker Daniels LLP

Thomas Cook et. al. v Palmer, Reifler & Associates and WALMART

Jurisdiction: United States District Court, Middle District of Florida

Client: PRA as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Developed expert rebuttal report challenging opposing expert's data analysis, and addressing technical aspects of identifying users/subscribers of cell phones. Provided deposition testimony.

Represented by: Shepard, Smith, Kohlmyer & Hand, P.A.

Toya Green-Mobley v Capital One Auto Finance

Jurisdiction: United States District Court, Middle District of Florida

Client: COAF as defendant

Nature of Case: Telephone Consumer Protection Act (TCPA) violation

Engagement: Developed expert rebuttal report address qualification of Defendant's calling system as an ATDS, including capacity to generate telephone numbers, use of human intervention, and the pre-recorded nature of phone messages. Provided deposition testimony.

Represented by: Burr & Forman LLP

Victoria Wilson et. al. v Badcock Home Furniture

Jurisdiction: United States District Court, Middle District of Florida

Client: Badcock as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Engagement: Developed expert rebuttal report challenging opposing expert's data analysis and methodology for identifying users/subscribers of cell phones, contributing to denial of class certification. Provided deposition testimony.
Represented by: Johnson & Cassidy, P.A.

Waddell Williams et. al. v Bluestem Brands

Jurisdiction: United States District Court, Middle District of Florida
Client: Bluestem Brands as defendant
Nature of Case: Telephone Consumer Protection Act (TCPA) violation
Engagement: Developed expert report analyzing Defendant's dialing platform and its characteristics related to Automated Telephone Dialing Systems.
Represented by: Faegre Baker Daniels, LLP

Exhibit B – LexisNexis Disclaimer**Tips for Researching LexisNexis® Public Records via Lexis Advance®****Consider Terms & Connectors**
to search for a:

- Particular debtor
- Particular creditor
- Date before, after or within a particular range for filings date, release dates or satisfied dates

For more information or
assistance with your LexisNexis
Public Records research call
800.543.6862.

*You must have a permissible use to search these sources. Laws applicable to use of this product include the Drivers' Privacy Protection Act and related state laws (DPPA) and the Gramm-Leach-Bliley Act (GLBA). The data regulated by the DPPA and the GLBA may be used only for the permissible uses, e.g., litigation, fraud detection, etc., that you select from a list prior to searching. By selecting a permissible use prior to searching, you are certifying that the data returned to you will be used only for that purpose. The data provided to you by use of this product may not be used as a factor in establishing a consumer's eligibility for credit, insurance, employment or other purposes identified under the Fair Credit Reporting Act (FCRA).

Due to the nature of the origin of public record information, the public records and commercially available data sources used in reports may contain errors. Source data is sometimes reported or entered inaccurately, processed poorly or incorrectly, and is generally not free from defect. This product or service aggregates and reports data, as provided by the public records and commercially available data sources, and is not the source of the data, nor is it a comprehensive compilation of the data. Before relying on any data, it should be independently verified.



LexisNexis, Lexis Advance, and the Knowledge Burst logo are registered trademarks. FOCUS is a trademark and LexID is a service mark of Reed Elsevier Properties Inc. used under license. SmartLink is a registered trademark of LexisNexis, a division of Reed Elsevier, Inc. Other products or services may be trademarks or registered trademarks of their respective companies. © 2013 LexisNexis. All rights reserved. LP21245-3 0313

4



Exhibit C – Partial List of Occurrences of LexisNexis Disclaimer

1. <https://risk.lexisnexis.com/products/provider-data-masterfile>
2. <https://risk.lexisnexis.com/products/carrier-discovery>
3. <https://risk.lexisnexis.com/products/motor-vehicle-records>
4. <https://risk.lexisnexis.com/products/claims-discovery>
5. <https://risk.lexisnexis.com/products/patient-data-masterfile>
6. <https://risk.lexisnexis.com/products/providerpoint>
7. <https://risk.lexisnexis.com/products/contact-score>
8. <https://risk.lexisnexis.com/products/clue-auto>
9. http://techhubly.com/lexisnexis-resources/files/A%20Business%20Case%20for%20Fixing%20Provider%20Data%20Issues_WPNXR5062-0.pdf
10. <https://www.lexisnexis.com/risk/downloads/assets/provider-data-masterfile.pdf>
11. <https://risk.lexisnexis.com/products/campaign-analyzer>
12. <https://risk.lexisnexis.com/products/clue-property>
13. <https://risk.lexisnexis.com/products/national-credit-file>
14. <https://risk.lexisnexis.com/products/attract>
15. <https://risk.lexisnexis.com/products/account-monitoring>
16. <https://www.ahip.org/wp-content/uploads/2016/06/Blue-Plan-Yields.pdf>
17. <https://risk.lexisnexis.com/products/attract-commercial>
18. <https://risk.lexisnexis.com/products/accurint-for-collections---contact-and-locate-workflow>
19. <https://risk.lexisnexis.com/products/accurint-for-collections-decisioning-workflow>
20. <https://risk.lexisnexis.com/products/accurint-for-healthcare>
21. <https://risk.lexisnexis.com/products/lexisnexis-instantid-for-insurance>
22. <https://risk.lexisnexis.com/products/id-compass-platform-for-insurance>
23. <https://risk.lexisnexis.com/products/identity-contact-resolution>
24. <https://risk.lexisnexis.com/products/instant-verify>
25. <https://risk.lexisnexis.com/products/instant-verify-for-healthcare>
26. <https://risk.lexisnexis.com/products/instantid-q-and-a-for-healthcare>
27. <https://risk.lexisnexis.com/products/instantid-business>
28. <https://risk.lexisnexis.com/products/keep-contact>
29. <https://risk.lexisnexis.com/products/law-enforcement-automated-personnel-system>
30. <https://risk.lexisnexis.com/products/lead-integrity-attributes>
31. <https://risk.lexisnexis.com/products/lexid-for-healthcare>
32. <https://risk.lexisnexis.com/products/lexisnexis-phone-finder-for-insurance>
33. <https://risk.lexisnexis.com/products/police-records-retrieval>
34. <https://risk.lexisnexis.com/products/promonitor-for-law-enforcement>
35. <https://risk.lexisnexis.com/products/profile-booster>
36. <https://risk.lexisnexis.com/products/prepayment-manager>
37. <https://risk.lexisnexis.com/products/predictive-modeling>
38. <https://risk.lexisnexis.com/products/phone-finder>
39. <https://risk.lexisnexis.com/products/worldcompliance-data>
40. <https://risk.lexisnexis.com/products/property-data-report>
41. <https://www.lexisnexis.com/en-us/products/public-records.page>

42. <https://www.lexisnexis.com/pdf/public-records/Public-Records-Relationship-Identifier-on-Lexis-Advance.pdf>
43. <https://risk.lexisnexis.com/products/worldcompliance-data>
44. <https://risk.lexisnexis.com/products/small-business-credit-report-with-sbfe-data>
45. <https://risk.lexisnexis.com/products/instant-age-verify>
46. <https://risk.lexisnexis.com/products/instantid>
47. <https://risk.lexisnexis.com/products/lexisnexis-small-business-credit-score>
48. <https://risk.lexisnexis.com/products/customer-data-management>
49. <https://risk.lexisnexis.com/products/due-diligence-attributes>
50. <https://risk.lexisnexis.com/products/lexisnexis-email-risk-assessment>
51. <https://www.lexisnexis.com/pdf/public-records/Differences-that-Deliver-Public-Records-on-Lexis-Advance-Snapshot.pdf>